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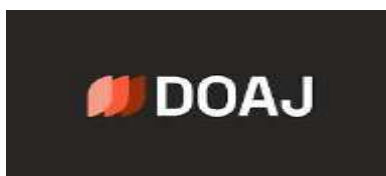
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La revue a pour dénomination **ZAOULI** qui désigne à la fois une danse et une musique populaires pratiquées par les communautés gouro, dans les départements de Bouaflé et de Zuénoula, en Côte d'Ivoire. Hommage à la beauté féminine, le ZAOULI s'inspire de deux masques : le Blou et le Djela. Son autre nom, « Djela lou Zaouli », signifie « Zaouli, la fille de Djela ». Le Zaouli associe, dans un même spectacle, la sculpture (le masque), le tissage (le costume), la musique (l'orchestre, la chanson) et la danse. Le masque Zaouli se décline en sept masques faciaux traduisant chacun une légende spécifique. Les détenteurs et les praticiens sont les sculpteurs, les artisans, les instrumentistes, les chanteurs, les danseurs et les notables (garants des coutumes et des traditions de la communauté).

Dès lors, le ZAOULI possède une fonction éducative, ludique et esthétique. Porteur de l'identité culturelle de ses détenteurs, il contribue également à la préservation de l'environnement, et favorise l'intégration et la cohésion sociale. La transmission de l'élément s'opère à l'occasion des représentations musicales et des séances d'apprentissage. Les amateurs en apprennent la pratique sous la supervision de praticiens expérimentés. La viabilité du ZAOULI est assurée grâce aux représentations populaires, organisées deux à trois fois par semaine par les communautés. La chefferie traditionnelle, garante des traditions, joue également un rôle clé dans le processus de transmission. Les festivals et les concours de danse inter-villages constituent également d'autres opportunités de revitalisation.

En définitive, le ZAOULI est réputé détenir des pouvoirs permettant l'accroissement de la productivité du milieu dans lequel il est pratiqué. Inscrit sur la liste prestigieuse du Patrimoine Mondial de l'UNESCO, le ZAOULI est une synthèse de la sculpture, la musique et le tissage. Elle a donc pour but de mettre

un point d'honneur sur la beauté féminine. C'est pourquoi, il se distingue par la finesse des traits du masque, la beauté de la danse et la grâce qui en font un spectacle fort apprécié dans les manifestations publiques.

Cette nouvelle revue vise donc à promouvoir la recherche et la réflexion dans les domaines suivants :

- ▶ Arts et Culture ;
- ▶ Lettres et Langues ;
- ▶ Sciences de l'information et de la communication ;
- ▶ Sciences Humaines et Sociale ;
- ▶ Sciences Juridiques et Politiques ;
- ▶ Sciences Economique et de Gestion ;
- ▶ Sociologie ;
- ▶ Anthropologie ;
- ▶ Psychologie ;
- ▶ Criminologie.

Elle vise également à publier les résultats des recherches menées par les chercheurs et à développer la production scientifique chez cette nouvelle génération de chercheurs. C'est une revue pluridisciplinaire dont l'enjeu est de favoriser un enrichissement entre chercheurs dans une relation de mutualisation des connaissances tout en s'inscrivant dans les normes scientifiques et éthiques du CAMES.

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Les articles à soumettre à la revue doivent être conformes aux normes suivantes :

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La structure du texte :

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Pour un texte qui se présente sous forme de contribution théorique et fondamentale : Titre, Prénoms et Nom de l'auteur, Institution d'attache, adresse électronique, Résumé en Français [250 mots maximum], Mots clés [5 mots maximum], [Titre en Anglais] Abstract, Keywords, Introduction (justification du thème, problématique, hypothèses/objectifs scientifiques, approche), Développement articulé, Conclusion, Bibliographie.

Pour un texte qui résulte d'une recherche de terrain : Titre, Prénoms et Nom de l'auteur, Institution d'attache, adresse électronique, Résumé en Français [250 mots au plus], Mots clés [7 mots au plus], [Titre en Anglais], Abstract, Keywords, Introduction, Méthodologie, Résultats et Discussion, Conclusion, Bibliographie.

Les articulation du texte : A l'exception de l'introduction, de la conclusion, de la bibliographie, les articulations doivent être titrées, et numérotées par des chiffres (Exemples : **1. ; 1.1. ; 1.2 ; 2. ; 2.2. ; 2.2.1; 2.2.2.; 3. ; etc.**). (Ne pas automatiser ces numérotations).

La conclusion doit être brève et insister sur les résultats et l'apport original de la recherche.

La référence bibliographique adoptée est celle des notes intégrées au texte. Elle se présente comme suit : (nom de l’auteur, année de publication, page à laquelle l’information a été prise).

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Les passages cités sont présentés en romain et entre guillemets (Pas d’Italique donc). Lorsque la phrase citant et la citation dépassent trois lignes, il faut aller à la ligne, pour présenter la citation (interligne 1) en romain et en retrait, en diminuant la taille de police d’un point (pas d’italique, pas de guillemets).

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Exemples

Le processus du sous-développement résultant de ce choc est vécu concrètement par les populations concernées comme une crise globale (S. Diakité , 1985, p. 105).

En effet, le but poursuivi par M. Ascher (1998, p. 223), est « d’élargir l’histoire des mathématiques de telle sorte qu’elle acquière une perspective multiculturelle et globale ».

NB : Les sources historiques, les références d’informations orales et les notes explicatives sont numérotées en série continue et présentées en bas de page.

Les divers éléments d’une référence bibliographique sont présentés comme suit :

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ouvrage, d'un mémoire ou d'une thèse, d'un rapport, d'une revue ou d'un journal est présenté en italique.

Dans la zone Éditeur, on indique la Maison d'Édition (pour un ouvrage), le Nom et le numéro/volume de la revue (pour un article). Au cas où un ouvrage est une traduction et/ou une réédition, il faut préciser après le titre, le nom du traducteur et/ou l'édition (ex : 2^{de} éd.).

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Exemples

AMIN Samir, 1996, *Les défis de la mondialisation*, Paris, L'Harmattan.

DIAGNE Souleymane Bachir, 2003, « Islam et philosophie. Leçons d'une rencontre », *Diogenè*, 202, 4, p. 145-151.

Les tableaux, les schémas et les illustrations

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Baisse de niveau généralisée et pléthore des effectifs comme principaux freins à l'éducation scolaire et acadé- mique au Congo-Brazzaville

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Résumé :

Dans cet article, nous voudrions signaler qu'en Afrique en général, au Congo-Brazzaville en particulier, un constat amer peut rapidement être fait, celui qui porte sur la baisse de niveau généralisée due à certaines causes, depuis quelques décennies. Cette baisse ne se constate pas uniquement du côté des apprenants, mais concerne aussi les enseignants. Il s'agit pour nous ici, non seulement de faire ce constat, mais surtout d'aider les formateurs eux-mêmes, à se remettre en cause et de faire une sorte d'autocritique. Si le niveau des élèves et étudiants a considérablement baissé, posons-nous vite une question dérangeante : le niveau de leurs enseignants s'est-il élevé ? À l'évidence, non. De toutes les façons, on ne reconnaît l'arbre que par son fruit. Même si l'on peut considérer que le niveau de l'enseignant s'est élevé, dans quelle salle enseigne-t-il et avec quels effectifs ? Ce qui montre que la compétence seule ne suffit pas. Nous voudrions en effet, à travers ce travail, demander aux enseignants eux-mêmes, acteurs de l'éducation, de faire une petite introspection. Le mal de l'école aujourd'hui n'est-il pas l'enseignant lui-même et la faiblesse de l'action gouvernementale elle-même ?

Mots-clés : pléthore, éducation, enseignant, élève, corruption

Generalized drop in levels and overstaffing are the main obstacles to school and academic education in Congo-Brazzaville

Abstract:

In this article, we would like to point out that in Africa in general, and in Congo-Brazzaville in particular, a bitter observation has been made, that of the general decline in standards due to certain causes over the past few decades. This decline is not only observed among learners, but also among teachers. Our aim here is not only to make this observation, but above all to help the trainers themselves, to question themselves and to engage in a kind of self-criticism. If the level of pupils and students has dropped considerably, let us quickly ask ourselves a question that may be a source of controversy: has the level of their teachers risen? Obviously, no. In any case, we only recognize the tree by its fruit. Even if we can consider that the level of the teacher has risen, in which room does he teach and with what number of students? As if to say that competence alone is not enough. Indeed, through this work, we would like to ask teachers themselves, those involved in education, to do a little introspection. Isn't the problem with schools today the teachers themselves and the weakness of government action itself?

Keywords: Overcrowding, education, teacher, student, corruption

Introduction

Lorsqu'on porte un regard pointu sur le fonctionnement de l'école africaine en général et sur celle du Congo-Brazzaville en particulier, un constat amer a priori peut être fait rapidement, celui qui consisterait à dire qu'il y a à son actif mille et un problèmes à résoudre et plusieurs questions auxquelles les réponses sont à chercher. Aujourd'hui, il est possible de soutenir la thèse selon laquelle, certains enfants disciplinés au départ dans leurs familles, apprennent à perdre leur bonne éducation en s'associant à d'autres, non pas seulement dans la rue, comme l'on a toujours pensé depuis, mais plutôt et plus gravement à l'école paradoxalement. Les réseaux sociaux qui ne sont pas forcément négatifs, montrent des faits qui ne sont pas facilement contestables selon lesquels, la sexualisation précoce de l'apprentissage social, fortement convoité par la jeunesse, l'éducation malheureuse dans le banditisme, la prise des stupéfiants, l'initiation à la criminalité, etc. se fait mieux à et dans l'école, personne ne peut, avec rigueur et rationalité. Ce phénomène est difficilement contestable d'un point de vue objectif.

Tout cela n'est-il pas simplement dû à la baisse de l'éducation scolaire et académique générée, à notre humble avis, par la baisse de niveau généralisée et la pléthore des effectifs dans les salles de classe et amphithéâtres où les ratios ne sont nullement respectés ? Pour résoudre cette question plus qu'épineuse, il est peut-être nécessaire de fonder en raison la mauvaise qualité de l'éducation scolaire et académique, de rechercher les conditions pour améliorer cette éducation. Les problèmes de l'école congolaise ne sont pas simplement nombreux, mais se sont rapidement transformés en ques-

tions de société. Hier nous étions colonisés, sans indépendance, et pourtant il y avait une assez bonne justice, aujourd'hui nous sommes indépendants après avoir chassé le blanc et pourtant les injustices ont atteint leur paroxysme, y compris à l'école, malheureusement. Hier nous croyions être châtiés et punis par le colon qui d'après nous, a tout mal fait, y compris à l'école, aujourd'hui nous sommes complètement abandonnés par nos propres frères et parents et l'école est, dans le même mouvement détruite par les mêmes. Le plus grand nombre des maux sociaux prennent aujourd'hui corps à l'école estropiée par nos propres politiques qui ne se centrent que sur les intérêts particuliers, une école où l'enseignement est souvent assuré sans compétence avérée.

Il est peut-être possible de trouver des issues de sortie à cette question de la baisse de niveau avec une forte volonté des décideurs qui devraient s'employer à améliorer les conditions d'apprentissage et de travail et les rémunérations des différents acteurs de l'éducation.

Ainsi, quelles sont les causes de la baisse de niveau au Congo-Brazzaville en particulier ? Seuls les pouvoirs publics en sont-ils responsables ? Les enseignants eux-mêmes ne devraient-ils pas aussi se remettre en cause ?

1. Fondation en raison de la mauvaise qualité de

l'éducation scolaire et académique au Congo-Brazzaville

S'il est à noter que visiblement le niveau, et des apprenants et des éducateurs, a considérablement baissé, cela doit être dû à certaines causes. Il est question pour nous ici d'en faire une généalogie afin de proposer, si possible il y a, quelques remèdes.

1.1. La baisse de niveau des formateurs de base : les instituteurs

La baisse de niveau généralisée dont on parle ici part de l'école primaire à l'université. Elle a sa véritable racine à l'école primaire en réalité, car c'est là que les bases seraient consolidées. S'il faudrait chercher à limiter considérablement les dégâts au niveau scolaire et académique, on doit engager la gigantomachie depuis ce point de départ. La baisse incroyable de niveau des formateurs de base est un problème au Congo-Brazzaville actuellement. Analysant ses fondements suivant les principes du principe de raison suffisante, principe qui établit que tout a une cause, nous les trouvons au premier abord dans les mauvais recrutements des élèves instituteurs dans les différentes écoles de formation. En effet, s'il faut le dire assez clairement, nous affirmerons et soutiendrons qu'après les événements de 1997, on y allait parfois sur titre, sans concours et même si concours il y avait, lequel effectivement ? Beaucoup de maux gangrènent donc notre système éducatif. Soit il n'y a pas de concours, comme nous venons de le signaler et cela pèse jusqu'aujourd'hui, soit il y a un concours où les seuls admis sont les échoués qui ont corrompu, comme on le sait et on le dit tout bas, soit ce sont des formations qui sont complètement bâclées sous la force de la même corruption. De toutes les façons, quand on est mal formé à la base, quels que soient les enseignements qu'on va recevoir, donnés par les plus excellents enseignants du monde, rien ne changera. Il n'y a au fond aucun miracle pour les questions de formation. C'est la raison pour laquelle nous avons fait référence au principe de raison suffisante.

Qui était instituteur hier ? Il était beaucoup de choses à la fois, un représentant de l'appareil étatique. Administrateur il

l'était puisque, c'est lui qui autrefois, écrivait presque toutes les lettres envoyées du village et lisait celles qui venaient au village, en plus de sa fonction d'éducateur de la jeunesse dans tous les domaines. Sans être nommé, il était l'interlocuteur principal des autorités qui venaient au village, parce qu'il avait le niveau requis. Sans exagérer, ceux d'aujourd'hui furent plutôt la présence des autorités, à commencer par leurs propres inspecteurs : c'est le témoignage le plus pointu de cette baisse que nous décrivons. Infirmier du village aussi, il l'était sur la base des cours de secourisme dont il bénéficiait à l'époque. Aujourd'hui, ce sont des cours de simple noms, puisque les instituteurs qui sortent présentement des écoles de formation ne peuvent pas eux-mêmes prendre le risque d'injecter un malade, à l'époque, si. On n'a pas à chercher loin la baisse de niveau au Congo. Elle se touche du bout de nos doigts. Au sport, c'était lui le seul maître d'éducation physique et sportive, car c'est lui qui donnait les conseils essentiels et requis, car il ne suffit pas de pratiquer le sport, mais il faut en connaître les règles. Il renseignait par ailleurs, sur les principes de la loi en général, expliquant les comportements passibles de poursuite judiciaire. C'est après avoir fait de manière assez sérieuse les cours de législation et déontologie qu'il en était effectivement capable, cours qui de nos jours ne sont que l'ombre d'eux-mêmes ou encore n'existent qu'à titre formel. Aujourd'hui mêmes ceux qui n'ont vraiment pas été à l'école contestent le niveau des instituteurs, en voyant naturellement le bas niveau de leurs enfants, car on ne reconnaît l'élève que par son enseignant.

Cette même baisse de niveau est due surtout aux causes internes à elle. Actuellement, sous l'effet du chômage, il n'y a presque plus des enseignants par vocation et par conviction. On y va pour avoir simplement un poste budgétaire.

C'est ce qui explique la fuite des enseignants vers d'autres secteurs beaucoup plus attractifs, par les effets financiers positifs qu'on y trouve. Il n'y a qu'un enseignant de vocation qui est en mesure de se remettre chaque fois en cause, afin de se former encore davantage. Celui qui est là malgré lui a tendance à faire des formations dites continues une véritable corvée sans intérêt : c'est ce qui accroît la vitesse de la baisse de niveau en question. S'il n'y a pas dans une affaire quelconque le profit, celle-ci ne marche pas bien.

La force incommensurable du chômage, la corruption dans les écoles de formation des instituteurs dont le niveau est partout décrié et la mauvaise sélection des admis aux différents concours d'accès aux Ecoles Normales des Instituteurs, font de telle manière qu'à un certain niveau, on ne soit plus en mesure de relever la pente malheureuse déjà créée. Dans certaines écoles, on a des instituteurs et même des enseignants du secondaire qui savent à peine conjuguer les verbes élémentaires. Cette baisse de niveau crée des trous qui ne peuvent en rien être comblés à l'université, étant donné que tout fonctionne comme les maillons d'une même chaîne.

1.2. L'école privée criminelle

Un autre problème majeur de l'école congolaise se trouve être celui que pose les écoles privées. En effet, depuis le début des années 90, l'Etat a commencé à libéraliser l'école dans le but de décongestionner les salles de classes en général et procéder à la facilitation des apprentissages. Cette politique judicieuse par sa forme, est aujourd'hui, très mal jugée par les effets négatifs nombreux et collatéraux dus à l'existence, aux mauvaises politiques et aux mauvaises pratiques de ces écoles, qui ont finalement eu d'autres ambi-

tions cachées. Tous les buts scolaires projetés ont été comme foulés au pied.

Tout semble partir, dans ces écoles, du mauvais choix des enseignants qui ne sont pas le plus souvent sélectionnés sur des bases définies en amont, par les hiérarchies étatiques, c'est-à-dire par les différents ministères en charge. Le plus grand nombre des enseignants qui y exercent n'ont pas, le plus régulièrement, le profil de ceux qui ont été dans des écoles de formation pendant le nombre d'années requis et ayant suivi tout le processus de formation digne de ce nom. Si l'enseignement requiert bien entendu un certain savoir, sa transmission harmonieuse requiert elle aussi l'observation des règles de pédagogie. Or, nous constatons que cette dernière exigence est comme foulée au pied à cause non seulement, du poids qu'elle donne au fonctionnement de ces écoles, mais aussi plus généralement, à la carence de ces types d'enseignants sur le terrain. Ce poids est lié à la question financière, car les enseignants réellement formés exigent une rémunération conséquente. Ceux qui ne sont pas formés pédagogiquement sont bon marché. Il faut le signaler, les écoles privées calculent la chose en termes d'argent et donc de bénéfice. Qu'on le veuille ou pas, qu'on le cache ou pas, l'école privée, c'est le grand commerce qui ne dit pas son nom. C'est cette dimension qui fragilise tout dans le système d'enseignement privé. Tout établissement privé est une affaire, c'est-à-dire un business ou précisément, un simple calcul de profits, quel qu'en soit le prix à payer. C'est ce qui est en train de gaspiller l'éducation scolaire et académique au Congo-Brazzaville. Même dans les universités privées, le même problème se pose. La rapidité avec laquelle les étudiants finissent leurs études dans ces établissements ne cesse d'inquiéter les observateurs critiques. La circulation de l'argent est une très mauvaise chose dans les questions édu-

catives. Ce n'est d'ailleurs pas pour rien, qu'à l'époque du colon, tout était gratuit à l'école. La notion de l'école obligatoire entre dans cette ligne précise. Face à l'argent, le plus grand nombre d'hommes est toujours prêt à tout. Il faudrait pour les pays de politiques fortes, pas de suppression de ces écoles, mais plutôt de leur contrôle. Cette force de l'argent se traduit par des passages automatiques stratégiques, destinés à pouvoir maintenir intelligemment les élèves et stimuler les inscriptions.

En outre, les recrutements des enseignants ici, sont fondés principalement sur la puissance du lien de filiation et non pas sur une quelconque compétence, puisqu'il s'agit, à n'en point douter, des entreprises familiales. La force inouïe du chômage dans lequel sont plongés certains pays africains, le Congo-Brazzaville en particulier, donne plus de vie et de temps à ces pratiques. C'est, il faudrait le dire et le redire, le niveau de l'école qui ne peut que prendre un coup, car dans cet univers, il n'appartient à personne de sanctionner personne. Faut-il condamner les promoteurs de ces écoles qui ne sont que de simples entrepreneurs ? Assurément, non. Le même mécanisme qui existe au niveau étatique est ici reproduit. Quand il y a à manger en Afrique, on appelle d'abord ses propres parents, ce qui est normal d'ailleurs selon le point de vue le plus bas. Mais, à l'école cela serait exécuté autrement pour que le concours des énergies différentes soit à l'œuvre, ce qui serait une force de plus. La bêtise est qu'effectivement, on n'a aucun critère de sélection à faire appliquer à ses propres parents pour le grand bonheur des apprentissages.

Dans toute formation, le système d'évaluation compte beaucoup. Au niveau du privé, il est complètement défaillant parce que l'art qui consiste à ménager les élèves dont les

parents payent bien la scolarité, influencent négativement ce système. Le plus souvent, ces enfants qui sont à chérir ont des fortes chances d'être classés stratégiquement parmi les premiers. Le seul projet secret, mais qui est inavoué, est de ne jamais les perdre. Si l'Etat pouvait être informé réellement de ce statut d'établissement de commerce qu'ont nos structures privées, il penserait peut-être même automatiquement à une autre forme de réglementation. Malheureusement, si l'Etat est incapable de résoudre efficacement le problème de l'école en général et de l'école privée en particulier, cela est à notre avis, dû à la forte augmentation de la population. Pour y parvenir, il faut créer les écoles au rythme de l'accroissement de cette population. L'école privée est une aide efficace dans ce sens. Voilà pourquoi au-delà du fait qu'elle est très défailante, il faudrait intelligemment la ménager. C'est ce qui tire considérablement tout dans l'éducation vers le bas. Comment croire que par la voie de l'école privée, on peut améliorer la chose, pendant que les passages sont automatiques ? Une petite esquisse de solution peut être envisagée : que tout soit peut-être coordonné par les pouvoirs étatiques ! Que l'argent et les bâtiments appartiennent au privé et que les élèves et les enseignants soient plutôt fournis par l'Etat qui procèdera à toutes les formes de contrôle pédagogique ! Que l'œil et la main de l'Etat soient visibles !

Ce qui est plus triste encore est que l'école privée engourdit la volonté des pouvoirs publics à s'y investir réellement en construisant les écoles dignes de ce nom en nombre suffisant, c'est-à-dire au rythme du développement de la population.

1.3. Un problème majeur : la pléthore

Parmi les obstacles qui freinent la bonne scolarisation figure la pléthore des effectifs dans les salles de classe et amphithéâtres. Il n'est pas facile de bien contrôler les apprentissages lorsque le nombre des apprenants dans les salles dépasse la norme. Au Congo-Brazzaville le *ratio* entre les élèves et l'enseignant n'est pas respecté depuis le début des années 2000, à cause de la forte augmentation de la population. La moyenne dans le plus grand nombre des lycées est de 200 élèves par classe, dans les établissements périphériques surtout. Au Lycée Thomas Sankara par exemple où j'ai moi-même exercé avant d'être recruté à l'Université, ce *ratio* pouvait même être vu à la hausse entre 2011 et 2017. Quelles que soient la compétence et la rigueur dans le travail d'un enseignant, il est non sans doute dans l'incapacité de faire régner la discipline, gage d'un bon apprentissage dans de telles salles de classes. De toutes les façons, quelles que soient par ailleurs, la conscience de soi et la timidité de la population d'une classe, dès que les effectifs sont largement au-delà de la norme, les lus sérieux peuvent apprendre à ne plus l'être par la simple influence du groupe. À ce moment-là, d'énormes difficultés surviennent à l'enseignant dans le processus de transmission, en toute sécurité, de son savoir. Or, ce qui est plus important dans les apprentissages, ce n'est pas seulement le savoir en tant que tel, mais aussi et surtout sa transmission, transmission qui est pénible à réaliser, quand on est confronté à la question des effectifs pléthoriques. Le problème de l'enseignement au Congo-Brazzaville est bel et bien là. Quand les effectifs sont trop élevés, l'enseignant, même le plus habile dans le métier, éprouvera des difficultés quant à suivre chaque apprenant, en ciblant par exemple les difficultés de chacun d'eux. N'est-ce pas sur

ce modèle qui consiste à distinguer les problèmes de chaque élève que l'enseignant d'antan travaillait ? Et sa réussite ne dépendait-elle pas de ces stratégies facilitées par le respect du *ratio* enseignant-élève ? À l'évidence, oui.

Pour s'en rendre effectivement compte, il suffit de se référer au mystère qui entoure la foule, elle surtout qui est une grande source d'inconscient collectif, aucune conscience n'y est possible. Quand il est très grand, le groupe ne peut que se transformer négativement. Même les enseignants eux-mêmes, rassemblés en masse, ne peuvent plus être, du tout, les mêmes, quelles que soient leur éducation de base et leur compétence. De la foule naissent assez rapidement les comportements déviants qui n'épargnent aucun jeune, par les simples effets d'imitation et de la mode qui, le plus souvent sont répétées de manière inconsciente. Le point de départ de la baisse de niveau généralisé que nous nous proposons de décrier est la question de la pléthore dans les établissements tant secondaires qu'universitaires. Faites une foule des élèves des années 80 qui étaient très conscients de leur avenir, qui travaillaient bien, qui étaient bien connus et bien suivis par leurs enseignants, ils seront les élèves des années 2010-2017, c'est-à-dire des élèves qui n'écourent que leur propre conscience.

Par ailleurs, prenez les enseignants de l'époque qui n'enseignaient que dans des salles de classes à effectifs très réduits et rationnels, placez-les dans celles d'aujourd'hui, ils seront les enseignants d'aujourd'hui, c'est-à-dire ceux qui échouent à leur mission d'éducation et de scolarisation de leurs élèves. C'est pour autant dire que les effectifs pléthoriques sont le plus grand problème de l'école en général et celui de l'école congolaise d'aujourd'hui en particulier.

2. Conditions pour une possible amélioration de l'éducation scolaire et académique au Congo-Brazzaville

Après avoir évoqué quelques raisons qui justifient la baisse de niveau de l'éducation scolaire et académique au Congo-Brazzaville, il faille proposer des pistes de solution à cet épineux problème. Il s'agit de se poser mille et une question sur l'école congolaise afin d'analyser ses multiples maux.

2.1. Autour des méthodes d'enseignement

Lorsque l'on aborde les possibilités qui peuvent aider à améliorer les rendements scolaires et académiques au Congo-Brazzaville, le premier regard doit être pointé sur le changement des politiques y relatives. Le plus souvent dans la majorité de nos pays africains, on pense que les méthodes d'enseignement sont les seuls leviers de bons apprentissages. Parfois, même avant d'évaluer une méthode en vigueur, on passe à une autre, adoptée dans un autre espace. Jusqu'à aujourd'hui, nous n'avons jamais compris pour quelles raisons réellement, les méthodes classiques d'enseignement ont échoué dans ce pays pour qu'on passe à d'autres et à d'autres encore. Nous sommes passés de la pédagogie classique où l'élève ou l'étudiant attendaient que le savoir réel vienne de l'enseignant et que lui-même ne soit considéré que comme simple répondant en vue de comprendre, à la pédagogie par objectif et très rapidement à la pédagogie par compétence, sans s'interroger sur les échecs des premières méthodes. Dans les méthodes traditionnelles, la mission était de faire des apprenants l'image du maître lui-même, non seulement sur le plan de l'attitude, comportemental que sur celui privilégié de la connaissance. Récepteur, l'élève cherchait à ressembler au maître et celui-ci cher-

chait à faire des disciples, ce qui marchait assez bien et le processus éducatif combinait avec harmonie. L'apprenant n'étant que ce qu'on a fait de lui.

Des enfants nés et élevés en bourgeoise imitent les conversations et politesse, offrent des sièges, reconduisent, saluent, et ne trouvent à cela aucune difficulté. C'est que les choses n'y sont guère, et que les personnes y sont presque tout. Les enfants d'acrobates, sur le tapis du cirque, essaient de se dresser sur la tête ou de faire le saut périlleux, choses dans lesquelles l'opinion ne fait rien, car la pesanteur corrige rudement le maladroit ; que les parents s'en mêlent ou non, c'est toujours comme si l'enfant était battu pour chaque faute » (Alain, 1932, p. 14-15).

Pourtant à bien voir les choses, elles n'ont presque pas échoué puisque le cas général est que malgré ces changements à la vas-vite des méthodes d'enseignement, le niveau ne fait que baisser de manière exponentielle. Nous parlons de politisation parce que dans ce domaine, on voudrait simplement que les pays s'arriment aux nouvelles donnes et être appréciés au niveau mondial, sans prendre en compte la situation réelle de nos propres apprenants et des conditions générales d'apprentissage dans nos écoles très pauvres en bâtiments et en enseignants. Alors que ces nouvelles méthodes adoptées exigent que les salles de classes soient plutôt décongestionnées pour leur efficacité. Que la méthode aille ou pas avec les conditions de travail, on l'adopte sans attendre et parfois au péril des apprentissages puisqu'elle est déjà acceptée au niveau mondial et le plus souvent par la France. C'est pour autant dire que nous qui condamnons peut-être même de manière plus qu'excessive les apprenants, sommes tous responsables de la baisse de niveau, nous enseignants et les pouvoirs publics. L'apprenant n'est à proprement parler qu'un innocent, car naturellement il n'est

qu'une table vierge qui attend à être rempli d'un contenu dont il n'est en rien responsable. Son âme vide au départ, ne peut être rempli que par son expérience, faite de ce qu'il voit, de ce qu'il entend et des ressources des personnes qui l'entourent et lui enseignent.

Supposons donc qu'au commencement l'âme est ce qu'on appelle *une table rase*, vide de tous caractères, sans aucune idée, quelle qu'elle soit. Comment vient-elle à recevoir des idées ? Par quel moyen en acquiert-elle cette prodigieuse quantité que l'imagination de l'homme, toujours agissante et sans bornes, lui présente avec une variété presque infinie ? D'où puise-t-elle tous ces matériaux qui sont comme le fond de tous ses raisonnements et de toutes ses connaissances ? À cela je réponds en un mot, de l'*expérience* : c'est là le fondement de toutes nos connaissances, et c'est de là qu'elles tirent leur première origine (Locke, 2000, p. 215-216).

Ainsi, c'est à l'enseignant de façonner de manière efficiente les élèves et aux pouvoirs publics d'aménager conséquemment les conditions d'apprentissage. La faute principale revient donc à l'enseignant et au décideur, car l'âme de l'enfant est au départ rase.

2.2. Lutter contre la corruption à l'école et à l'université

Il y a encore un problème qui gangrène la question de l'éducation, c'est celui de la corruption. Le fait que les enseignants soient en général mal payés, très mal avancés et presque considérés comme des fonctionnaires de basse échelle, complique la situation des apprentissages, non seulement au Congo, mais aussi dans la plupart de nos pays africains. Les passages automatiques sont causés, au secondaire surtout, par ces difficultés quant à atteindre l'autre bout du mois. Qui ignore qu'au monde les enseignants sont

les seuls victimes de la raillerie de la part des autres fonctionnaires ? Cela s'explique par la présence massive des enseignants aux différents tests de changement de carrière organisés par le ministère de la fonction publique. Personne non plus, n'ignore que dans ce pays, aucun fonctionnaire ne vient à ces tests pour vouloir quitter sa corporation de base et devenir enseignant. Cette boîte n'est considérée que comme porte d'entrée dans l'appareil étatique. Cela ne peut être contesté par personne. La corruption à l'école naît de là et ne cesse de s'enraciner. Comment lutter contre ce phénomène alors ? Aucun autre moyen en réalité, revoir toutes les grilles de paiement de ladite boîte afin de permettre aux enseignants de ne pas trouver des moyens subsidiaires de résolution des difficultés financières qui se présentent à eux avec acuité. Un élève ou un étudiant qui est en face d'un enseignant bien habillé par exemple, bien portant, venant au service en voiture personnelle, ne peut pas avoir le courage de vouloir le corrompre. Or pour bien se rendre compte de la pauvreté financière en milieu enseignant, véritable stimulus de cette corruption, il suffit d'aller voir les espaces réservés aux parkings dans les différents établissements, espaces qui sont le plus souvent, sinon totalement vides, à tout le moins, quasiment vides. Il faudrait tout faire pour que des fonctionnaires autres que les enseignants puissent avoir la volonté de venir à l'enseignement. Toutes les politiques de lutte contre la corruption sont appliquées ailleurs, non dans le but d'éloigner les enseignants de ces tentations. À l'école, il n'y a qu'à l'égard de la tricherie dont sont auteurs les élèves candidats aux examens d'Etat, que de bonnes et fortes politiques sont élaborées et exécutées.

Par ailleurs, parmi les moyens qui peuvent permettre aux pays africains d'éradiquer ce phénomène qui ne cesse de peser sur l'éducation, il y a bien entendu l'intégration des

enseignements sur l'éthique et la morale, peut-être même depuis les basses classes afin que nous puissions commencer à redresser le bois tordu pendant qu'il est encore possible de le redresser. Ces enseignements doivent être aussi intégrés dans les multiples programmes de formation des formateurs.

Quelques avancées significatives sont quand même constatables, en ce qui est de l'Université, avec l'intégration, dans un nombre important de filières, des enseignements concernant l'éthique et la morale. Ces enseignants formés pour évoluer dans les différents collèges de la république seraient chargés de continuer une œuvre qui consiste à intégrer quelques notions de bonne conduite, œuvre qui devrait faire ses premiers pas, si les programmes sont bien établis et bien révisés, depuis l'école primaire, cela permettrait d'ailleurs d'éviter qu'il ait des coupures.

3. Faut-il retourner à l'école de type colonial ?

Face à cette chute de l'éducation, il est possible de regretter certaines manières de faire de la colonisation qui n'a pas été, somme toute, totalement négative. Ne fallait-il pas faire la part des choses en capitalisant les acquis positifs des pratiques coloniales et délaisser les points jugés négatifs ?

3.1. Retour à la méthode traditionnelle

Lorsqu'on regarde de plus près la montée, pourrait-on dire, de cette baisse de niveau généralisée, il y a lieu de s'interroger s'il ne faut pas de toute urgence revenir aux méthodes traditionnelles et aux pratiques d'antan, méthodes pensées et appliquées par le colon. Rien ne prouve d'ailleurs que celles-ci ont réellement échoué, au-delà du fait que l'Afrique a le plus souvent pris ce qu'a fait le colonisateur

pour complètement négatif et surtout idéologique. Pour s'en rendre vraiment compte, il suffit de procéder à la comparaison des élèves et enseignants de ces époques de la colonisation et ceux d'aujourd'hui, sur le plan du niveau de base pour les élèves, et pour les enseignants, non seulement sur le plan du niveau de base, mais aussi sur celui de la bonne maîtrise des méthodes d'enseignement. Les méthodes choisies à cette époque n'ont peut-être pas, elles aussi, failli. La réussite d'une éducation est une question qui ne dépend pas seulement du savoir que l'on transmet à l'apprenant, mais aussi et essentiellement de la règle que l'on suit dans ce partage des connaissances dans les apprentissages. Et la connaissance qu'on est censé donner à l'élève et les stratégies qu'on élabore en vue de faciliter ces acquisitions, ne forment qu'un seul corps dont la mutilation d'un seul maillon désagrège l'ensemble du processus. « On a eu tendance, pendant longtemps, à considérer tantôt l'acte d'apprentissage, tantôt l'acte d'enseignement, au lieu d'étudier l'unité d'action qu'ils supposent et d'analyser le processus d'interaction qui s'établit entre les deux » (Postic, 1979, p. 17). A-t-on bien réfléchi quand nous passions des anciennes méthodes aux nouvelles ? A-t-on bien comparé les élèves et étudiants des pays d'où venaient ces nouvelles méthodologies aux nôtres ? A-t-on bien examiné si elles sont véritablement adaptées pour le meilleur apprentissage de nos enfants qui pour la plupart, ne font pas l'école maternelle ? Si tous les changements ont leur mélancolies, ceux liés aux procédées sont responsables de la baisse de niveau que nous décrivons. Pour une raison toute simple d'ailleurs. Il y a des méthodes qui ne cadrent pas avec la disposition de nos salles de classes et les effectifs dans ces salles. Prenons le cas de celle qui était en exécution il y a juste quelques années, nous voudrions nommer, la pédagogie par objectif qui est une pédagogie

destinée aux salles à effectifs réduits, alors que les nôtres sont, jusqu'à présent plus que pléthoriques. D'après les exigences de cette pédagogie, il faut faire répéter dès le début du cours, l'objectif à atteindre à tous les élèves, de telle sorte qu'ils savent à priori ce qu'ils sont tenus de réaliser au soir de l'enseignement qu'ils suivent, ceci paraît-il, pour ne pas perdre la ligne de conduite et le fil d'idée dessiné au départ. Mais, imaginons un cours qui doit se faire dans les salles que nous venons de peindre. Est-il possible de réussir selon les règles de l'art cet exercice ? Assurément non, sauf à tout bâcler au passage.

À ce moment-là, le retour à l'école de type colonial peut effectivement être de mise, pour quelques raisons fondamentales. D'abord, ce n'est pas toujours mauvais que le savoir parte de celui qui est censé l'avoir officiellement, surtout pour nos enfants africains qui sortent des milieux divers. On ne va pas quand même attendre les prérequis venant de la part d'un enfant qui n'a jamais suivi la télévision, puisque dans nos pays, elle n'est pas disponible partout. L'élève d'hier attendait tout de son enseignant et réussissait en toute sérénité sa vie scolaire et pouvait évoluer assez normalement, jusqu'à devenir un cadre de la république. La méthode traditionnelle d'enseignement n'a jamais failli, à bien voir les choses, on ne comprendrait pas qu'elle soit remplacée par celle qu'on ne maîtrise pas encore. Au nom de la seule nouveauté, il est possible de tout détruire par la suite en délaissant ce qui est ancien et qui tient encore. Logiquement, il est nécessaire de faire une évaluation de la méthode en exercice, avant de passer ou vouloir passer à une autre. Au Congo-Brazzaville rien de tel n'a été fait quand nous passions de la méthode traditionnelle où l'élève était pris pour un ignorant qu'il fallait emmener à la connaissance

et éduquer à celle qui exige que l'élève ou l'enfant soient plutôt mis au centre du processus d'apprentissage. La preuve que cette méthode n'a pas failli est le niveau acceptable de ceux qui enseignent aujourd'hui qui y ont été moulés. L'enfant qui sait qu'il est comme pris pour celui qui ne dispose pas de connaissances, est enthousiasmé à battre en brèche son ignorance, pour vouloir se hisser à un niveau supérieur. Il n'a plus d'envie à savoir s'il est conscient du fait qu'on suppose l'existence en lui d'un certain savoir. L'élève d'antan, sous l'ancienne méthode, venait pour apprendre de son maître ou de son professeur. Celui d'aujourd'hui s'illusionne à savoir parfois plus que son enseignant, avantage apparent que lui offrent toutes les technologies actuelles. Si on fait un réel bilan, il serait possible qu'on décide de retourner aux anciennes méthodes qui, à notre humble avis, ont eu des délices. On a déjà changé assez de méthodes d'enseignement, pour chercher à améliorer le niveau. Malheureusement, la chose ne fait que décroître. Cela laisse à réfléchir.

3.2. La chicotte a-t-elle failli à l'école ?

L'Afrique a pendant longtemps subi la colonisation. Pendant longtemps encore, elle a crié haut et fort sur ses nombreux méfaits. Reste cependant à savoir si cette œuvre de la colonisation de la part des Occidentaux a été totalement négative en soi car si le colon a traité le noir non seulement de petit Nègre par sa taille peut-être et par l'insuffisance supposée de ses qualités naturelles, comme un homme dépourvu d'histoire, il l'a quand même habillé et soigné, il l'a néanmoins instruit et éduqué par l'école qu'il a apportée. Au-delà du fait qu'on peut faire une parade en disant que le Noir pouvait avoir ses raphias et était en mesure de se soigner traditionnellement par les plantes et

feuilles de la forêt, la colonisation n'était pas à balayer totalement par un revers de la main. Mais il faudrait reconnaître que les raphias n'habillaient qu'un petit nombre. L'instruction au moins demeure véritablement l'apport combien indéniable du colon qui est parfois simplement diabolisé. Construisant les écoles en y envoyant les noirs que nous étions, le colon était, non pas à encenser, mais néanmoins, nous devrions lui témoigner ce mérite dans la douleur. Cette instruction s'accompagnait de la chicotte qui a été diversement interprétée. Quelle est le jugement qu'on en fait et qu'on continue d'en faire jusqu'à aujourd'hui ? Fut-elle positive ou négative ?

Dans la relation éducative, l'enseignant n'est pas le seul qui influence, soit positivement, soit négativement les apprentissages, l'élève lui-même aussi et surtout. Peu conscient de son propre avenir et des différents soucis de son éducateur à son égard, il lutte contre les choix de l'enseignant qui ne cadrent pas avec son univers de préférence et s'oppose tant qu'il le peut à toutes les orientations qui sont rejetées par la volonté de son esprit. Ainsi, laisser libre cours à toutes les expressions de l'apprenant ressemble à l'action de celui qui abandonne un autre au choix peu rassurant, au nom uniquement de la liberté. C'est malheureusement ce à quoi s'emploie toutes les nouvelles pédagogies qui réclament haut et fort que l'apprenant soit toujours au centre. L'action éducative n'est pas influencée par le facilitateur des apprentissages, mais par le récepteur qui est l'élève. La coercition qu'imposent les méthodes traditionnelles est de mise, peut-être même nécessaire.

Les théories de l'apprentissage risquent, en effet, de faire percevoir l'enseignant comme le manipulateur de stimuli et de renforcements, et l'élève comme le sujet réagissant aux sollicitations, comme celui dont le

comportement est entièrement sous la dépendance des stimuli externes. C'est oublier que les élèves sont des acteurs dans le processus apprendre-enseigner, qu'ils agissent par leurs attitudes, par leurs actes, qu'ils manifestent des comportements opérants, voire de décision, affectant leur apprentissage et de celui des autres avec lesquels ils sont en communication. C'est oublier aussi que le processus enseigner-apprendre s'effectue dans un milieu caractérisé sociologiquement, qui dépasse le cadre de la classe et de l'école (Postic, 1979, p. 19).

Un peu de forcing intelligent, un peu de violence douce et imperceptible peuvent bien alimenter une bonne éducation. L'emploi de la chicotte dans le seul but de dissuader l'enfant à renoncer à certains actes ne peut pas être en soi mauvais. Voilà pourquoi la formation académique ne peut pas à elle seule remplir toute la tâche nécessaire pour une éducation digne de ce nom. Les stratégies d'enseignement sont de beaucoup. Le statut de bon enseignant ne s'acquiert nullement par le simple fait que l'esprit est rempli de connaissances, mais il ne s'obtient que par la manière de communiquer et de partager ce que l'on possède. C'est la raison pour laquelle parlant de la formation pédagogique Mialaret (1977) écrit qu' « elle est pour nous indispensable et ne s'oppose pas, bien au contraire, à la formation académique. Ce n'est pas avec des ignorants que l'on fera, quelle que soit la formation pédagogique, de bons enseignants. Mais si la formation académique est nécessaire, elle n'est pas suffisante pour devenir un bon éducateur » (p. 8).

En effet, sur cette question de la baisse de niveau que nous abordons, il est possible de regretter, ne serait-ce que du fond de nos cœurs, la suppression de la chicotte à l'école. Les enfants, à l'école primaire ne sont pas vraiment conscients de l'importance de la scolarisation et ne savent même

pas qu'il s'agit-il de la préparation de leur avenir. Ainsi, ils sont en proie à la paresse, à la négligence, prêt à se laisser aller à l'inessentiel. Seule l'imposition de la discipline, la contrainte, la coercition peuvent aider à faire retrouver la voie à nos enfants. Tout cela ne passe-t-il pas par la chicotte ? Nous l'affirmons sans craindre de nous tromper. Entre un enfant châtié et un enfant choyé, nous pensons bien évidemment que seul le premier ouvre plus sûrement le chemin de la réussite et de l'épanouissement.

Lorsque quelqu'un dit, après tant d'autres, qu'il faut plaire aux enfants, et que c'est le vrai moyen de les instruire, on laisse passer. Mais je n'aime pas trop cette bouche en cœur, ni ce maître courtisan. J'ai rencontré, quand j'étais sur les bancs, un professeur assurément affectueux, et qui intéressait son jeune auditoire ; je puis même dire que nous l'aimions. Or, il ne put jamais surmonter un certain désordre, qui résultait surtout, je m'en souviens très bien, de marques indiscrètes d'approbation (Alain, 1932, p. 18).

Un maître aimé apprend mal à ses élèves et c'est celui qui est le plus souvent haï et rejeté qui finit par former des hommes importants, c'est-à-dire des savants, aussi paradoxal que cela puisse paraître. Le colon ne chicotait pas pour faire volontairement mal et pour tuer, même si de cas pareils sont parfois arrivés à travers l'histoire et l'espace. S'il faudrait faire le bilan entre l'école sans chicotte et l'école avec elle, nous osons croire que face à la situation plus que décevante de la baisse de niveau dans toute l'Afrique aujourd'hui, il y a lieu de réclamer l'autorisation raisonnée de la chicotte. Les anciens élèves du temps de la chicotte se rappellent bien évidemment qu'il fallait à tout prix faire la lecture et les devoirs donnés par le maître pour ne pas subir le châtement. Ainsi, on se formait sans pourtant le savoir ré-

ellement. Il n'y a, à notre avis, aucun mal à cela, sauf si l'enseignant le fait par pure haine à l'égard de certains élèves, ce qui ne pouvait qu'être rare à cette époque où l'enseignant était assez bien formé, tant sur le plan de la connaissance que celui de la morale. Aujourd'hui peut-être, on pouvait le comprendre, mais hier au bénéfice du doute quand même. C'est une façon pour nous de dire que la colonisation n'était pas mauvaise en soi.

Ce que nous voudrions affirmer est qu'en réalité rien ne prouve que la chicotte a vraiment failli à sa mission de redressement des consciences enfantines. Un autre problème de l'Afrique est qu'elle semble copier tout naïvement ce que les Occidentaux conçoivent et adoptent. Veut-on dire, en supprimant la chicotte que les parents et enseignants de l'époque où la chicotte était employée à l'école, n'aimaient pas les enfants et les élèves ? La peur est parfois, dans une certaine mesure salubre et salvatrice. L'intention du colon enseignant ou du maître en tant que tel n'était pas, à notre humble avis, méchante et criminelle dans son art d'utilisation de la chicotte. Hier nous croyions, nous élèves de l'époque, que le maître avait une forte haine pour nous, aujourd'hui, en tant que parents d'élèves, nous sommes censés croire plutôt qu'il avait, du tréfonds de son cœur, un grand souci de notre avenir. La force avec laquelle il l'appliquait sur notre corps d'élève, fut la force de sa volonté de nous conduire imperturbablement vers la réussite.

Disons que toutes ces méthodes et toutes ces stratégies d'enseignement, que nous sommes en train de décrire, sont présentement mutilées par les productions de la technologie qui ont un grand impact négatif ou positif sur les apprentissages en tant que tels. Les enseignants sont en difficulté quant à appliquer toutes les techniques apprises dans leur formation, à cause de l'utilisation plus que massive du nou-

vel outil, l’outil technique qui a malheureusement plus d’audience auprès des élèves.

L’histoire nous a légué des méthodes adaptables aux situations actuelles ; le développement de la technique contemporaine met à notre disposition des procédés nouveaux (audio-visuel, ordinateur, technique de re-production) qui ont modifié les relations pédagogiques maître-élèves, les relations de l’élève et de son milieu, les relations de l’enfant et de l’éducateur au savoir (Mialaret, 1977, p. 13).

Revenir aux anciennes formules d’éducation peut nous aider efficacement s’il est établi que les faiblesses des anciennes méthodes n’ont pas été élaborées et exposées.

Conclusion

Pour traiter ce mal épineux qui est en train de gangrener de manière forte l’école congolaise, il faut avoir le courage de prendre des décisions révoltantes qui peuvent, à la rigueur, être celles qui dérangent. Evitant de tenir le serpent par la queue, il est nécessaire de mettre l’accent, dans un tout premier temps sur l’école primaire, elle qui est la fondation ou le socle. Cela commence par la bonne formation des éducateurs de base, c’est-à-dire les instituteurs. Signalons par ailleurs que cela ne peut se faire avec facilité que si et seulement si la sélection au niveau des concours d’entrée dans les Ecoles Normales d’Instituteurs est bien faite en amont. Or, présentement, nous ne devrions pas avoir honte ni peur de l’affirmer, c’est l’argent qui joue le plus grand rôle. En remontant la pente, urgence est faite de s’interroger sur le niveau de ceux qui les forment eux-mêmes, car avant d’accuser les mauvaises acquisitions des apprentissages, il

faudrait quand même jauger du niveau des auteurs de ces apprentissages.

Après cela, voir la question des effectifs dans les salles de classes, de l'école primaire à l'université. Là, il s'agit de construire simplement des écoles et des universités au même rythme que l'évolution de la population. Décongestionner les salles peut aider à faire assimiler les apprentissages. Cette stratégie qui consiste à construire les écoles et les universités devrait aller de pair avec le recrutement des enseignants à tous les niveaux bien entendu.

Pour remonter le niveau au Congo-Brazzaville, une seule maxime à respecter scrupuleusement : que le décideur politique se remette en question et que l'enseignant lui-même se regarde dans le miroir. Le premier pour voir si oui ou non, il gère le denier public équitablement, gestion équitable qui faciliterait en toute sécurité les constructions en question. Le deuxième pour voir si oui ou non, il mérite vraiment cette place à l'estrade de la salle de classe.

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Le discours de positionnement français et russe à l’assaut de l’espace politique africain

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Résume :

Cette étude porte sur l’analyse des discours tenus par les ministres des Affaires étrangères français et russe en terre africaine dans le cadre d’une offensive diplomatique en contexte de crises multiformes. Les discours institutionnels des chefs de la diplomatie de ces deux pays qui s’inscrivent résolument dans la défense, la préservation ou encore la conquête de zones d’influence sont porteurs de sens à divers niveaux. Ainsi, par l’analyse nous avons mis en exergue la généricité de ce discours, qui s’inscrit dans la modalité narrative, une forme discursive de la construction de l’image de soi et de la déconstruction de celle de l’autre. Par la suite, nous avons interrogé la visée sous-jacente à cette production, qui s’avère être propagandiste. Pour finir, par l’analyse de l’espace sémantique africain, l’impact de ce discours d’influence a été jugé minime dans la logique d’une Afrique qui se veut désormais mondialisé et ouverte au multilatéralisme.

Mots clés : institutions, discours, narratif, propagande, influence.

French and Russian positioning discourse on the assault on African political space

Abstract :

This study focuses on the analysis of speeches made by the French and Russian foreign ministers on African soil as part of a diplomatic offensive in the multifaceted crisis. The institutional speeches of the heads of diplomacy of these two countries, which are resolutely part of defense, preservation or even conquest of zone of influence, are meaningful at various levels. Thus, through analysis we

have highlighted the generic nature of this discourse, which is part of narrative modality, a discursive form of the constructing of the image of oneself and the deconstructing of that of the other. We subsequently questioned the underlying purpose of this production, which turn out to be propaganda. Finally, through the analysis of the African semantic space, the impact of this influential discourse was judged minimal in the logic of an Africa, which now want to be globalized and open to multilateralism.

Keywords: *institutions, speeches, narrative, propaganda, influence.*

Introduction

La notion métaphorique de “pré-carré” qui traduit l’influence tant politique, militaire qu’économique et culturelle de certains États sur d’autres illustre bien les rapports de dominance dans les relations internationales. Au-delà du principe d’égalité entre les États promulgué par la Charte des Nations Unies (ONU)¹ en son article 2, il se démarque dans les relations internationales entre États, l’ascension “d’États puissants” ayant influence et droit de regard sur les autres plus “faibles”. Dans cette logique et au gré des conjonctures politiques, il s’instaure entre les puissances étatiques une lutte pour conquérir, défendre ou préserver leur zone d’influence politique, le pré-carré. Cette ambition d’influence donne jour à la résurgence de la présence russe en Afrique subsaharienne dans des sphères traditionnellement influencées par la présence française, créant du coup des « rapports entre ses unités politiques qui se conçoivent *en termes d’hostilités* » (A. Bussié Bi N’Ze 2021 : 85 ; A. Arkhengelskaya 2013 : 64). Le terrain africain est devenu dans ce cadre un « nouveau front géopolitique » (M. Audinet & K. Limonier 2022 : 133) où s’affrontent les puissances en opposition à travers une activité discursive soutenue. Ainsi, pour porter leurs visions, leurs ambitions et les idéaux qui légitiment leur présence en terre africaine, ces institutions étatiques, incarnées par leurs ministres des affaires étrangères, se muent en des appareils politico-discursifs dans le cadre de leur campagne diplomatique.

¹ La Charte des Nations Unies (ONU) est un traité adopté le 26 juin 1945 à San Francisco. Elle définit les objectifs et les principes de l’organisation ainsi que la composition, les missions et les pouvoirs des organes exécutifs.

Cette étude se penche sur les discours prononcés par le ministre des affaires étrangères de la Russie, Sergeï Lavrov, et par la ministre de l'Europe et des Affaires étrangères de la France, Catherine Colonna dans différents pays africains dans le cadre d'une offensive diplomatique. Les chefs de la diplomatie de ces deux puissances ont eu une présence assidue en terre africaine dans un contexte de crises multiformes et de renouvellement de paradigme de gouvernance. En effet, ce ballet diplomatique fait suite non seulement à l'éclatement de la guerre russo-ukrainienne, des crises dans le sahel avec leur corolaire de coup d'état mais aussi de la rupture des accords bilatéraux avec la France avec retrait immédiat, de la mise en cause du fonctionnement du Franc CFA ou encore du positionnement militaire russe en Afrique avec le groupe militaire Wagner. En venant en Afrique marqué ainsi leur présence sur le continent, ces puissances recourent à un soft power soutenu par une importante production discursive institutionnelle « où chacun se donne le droit non seulement de maintenir, mais aussi d'essayer de faire prévaloir sa position dans ses composantes idéologiques et identitaires » (R. Amossy, 2014 :245). Ces énonciations discursives institutionnelles en même temps qu'elles sont porteuses des visions et des doctrines (le positionnement) de leur émetteur, sont également la matérialisation de l'endiguement (annihilation) de l'influence adverse. Dans un tel contexte, où l'activité discursive n'est ni neutre dans sa conception ni dans sa production émerge un ensemble d'interrogation majeures. Ainsi, à partir de quelle modalité discursive émerge ce discours institutionnel de positionnement ? Comment s'y construit l'image de soi (positionnement) et comment s'y déconstruit (annihilation) celle de l'adversaire-ennemi ? Quels sont les principes de la visée d'influence sous-jacents dans ces productions ? Sont-

ils informatifs ou propagandistes ? En quoi ces discours modifient-ils l'espace sémantique africain ?

1. Cadre théorique et constitution du corpus

1.1. Référence théorique

Nos analyses dans le cadre de cette étude se feront aux prismes de la théorie des genres et de la visée discursive développée d'une part par J.M. Adam (1992 ; 1997 ; 2011) et d'autre part par P. Charaudeau (1995 ; 1997 ; 2010). S'inscrivant dans le champ de l'analyse du discours, cette approche modale des discours inspirée par la réflexion typologique, s'évertue à mettre en exergue les mécanismes qui institutionnalisent une production langagière de manière plus ou moins prototypique tels que le narratif, l'argumentatif ou l'explicatif. Ainsi, la détermination des mécanismes macro-compositionnels d'une production discursive concourt à cerner son "ancrage social", "sa nature communicationnelle" et "ses caractéristiques formelles". Or ces éléments de détermination générique du discours sont hautement performatifs. Ils permettent d'appréhender les intentions et les "principes d'influence" et les finalités construites dans et par l'activité langagière.

1.2. Constitution du corpus

La nécessité de la constitution du corpus de notre étude nous a conduit à explorer des canaux médiatiques à travers lesquels les discours de l'étude ont été diffusés. La constitution de ce corpus médiatique a été soumise à la condition de commensurabilité des données langagières recueillies. Pour V. Bonnet (2023 : 02) « l'univers médiatique relève des praxis sociales et culturelles et les discours écrits, oraux et multimodaux constituent les corpus ». Ainsi, nous avons

recueilli les productions discursives de la ministre française de l'Europe et des Affaires étrangères, Catherine Colonna et du ministre russe des Affaires étrangères Sergeï Lavrov à travers plusieurs canaux médiatiques. S'ajoute également à notre corpus la réaction de quelques dirigeants africains face aux discours eurasien. Nous avons eu recours à plusieurs médias, en l'occurrence, le site internet Vie Publique, Afrique Média, Jeune Afrique, France24 et RFI. Ces discours ont été prononcés dans différents pays sur le continent africain dans le cadre de la vaste offensive diplomatique entreprise par ces deux puissances européennes entre décembre 2022 et juin 2024.

2. Formes de discours institutionnalisées et construction des logiques de positionnement et/ou d'annihilation

La parole publique des institutions incarnées et portée par les représentants mandatés par celles-ci se déploie sous un prisme onto-politique. Dire au nom de l'institution s'avère être un exercice de choix et de projection en adéquation avec la puissance idéologique de l'appareil politique représenté. D'emblée, l'énonciation institutionnelle se fait dans un système de contrainte, en ce qui concerne la production, "l'infrastructure", qui elle-même influent sur sa "superstructure", en ce qui concerne l'idéologie. Pour A. Duchêne (2004 : 97), « aucune des activités discursives telles que prendre la parole, proposer des résolutions n'émane d'une spontanéité créative non contrôlée. Au contraire, ces diverses activités font l'objet d'un processus codifié par le biais d'un contrôle institutionnel ». Le cas particulier des ministres des affaires étrangères russe et français dans les pays du continent ne fait pas exception de cette orientation configurationnelle de la parole institutionnelle. S'inscrivant dans le cadre d'une offensive de rapport de force, les pro-

ductions discursives constituant notre corpus ont été élaborées par le biais de choix discrétionnaire dans le champ des classifications modales. Ainsi, en s'assignant pour objectif le marquage de l'espace politique, la défense de sa position ou encore l'annihilation de l'influence de son adversaire-ennemi, ces énonciations politiques vont faire recours à un discours de type opératif (persuader-requérir) qui prend forme dans une modalité narrative. En effet, dans la perspective discursive, le choix d'un genre particulier fait par l'énonciateur se justifie par plusieurs raisons. D'une part, le genre discursif permet la construction du propos de l'énonciateur selon des conventions qui régissent une famille de discours. A ce niveau, le genre discursif favorise l'élaboration du discours et joue un rôle représentationnel. D'autre part, du point de vue de la visée, aspect que nous développerons dans la seconde partie de cette étude, le genre de discours met à la disposition de l'énonciateur des outils sémiotiques cristallisants des significations associées aux pratiques sociales et dont l'appropriation permet l'extériorisation d'expérience culturelles sédimentées. Dans ce cadre, le genre narratif met à disposition dans la perspective sémiotique une structure constitutive du discours, un plan de structuration et un niveau d'organisation et de communication de sens. A propos de l'usage de cette modalité dans les rapports entre entités institutionnelles, Y. Delahaye (1997 : 111) dira en substance que :

« Ce modèle fonctionnel se retrouve dans les relations internationales. (...) Tout acteur tend à s'instituer en actant-sujet d'une quête dont le déroulement s'effectue dès lors à partir de son vouloir. Il existe aussi un destinataire, celui pour le compte de qui agit le sujet, le bénéficiaire de la quête. Quant à l'adjuvant et à l'opposant, il n'est pas nécessaire de les décrire.

Chacun les reconnaît (...), ennemi héréditaire ou allié fidèle, adversaire ou partenaire d'un moment. »

En effet, la narrativité repose sur une différence fondamentale, celle qui distingue les situations (états) et les actions (le faire). Cette complexité narrative met en œuvre un ensemble de données linguistiques qui constituent un système ordonné de règles qui décrit à la fois les éléments et les relations. Ainsi, la configuration narrative prend ses sources dans le structuralisme du "sens comme une différence" qui part notamment du passage du "manque" au "rétablissement de l'ordre" dans un enchaînement logico-causal. Dans notre corpus, les productions discursives institutionnelles sont corrélées à la résurgence de diverses situations de tensions (crises). Ces situations tensives qui viennent mettre en cause l'ordre initial des choses deviennent de facto les éléments déclencheurs du déploiement discursif comme le démontre les énoncés ci-dessous respectivement tenus par Catherine Colonna (CC) et Sergï Lavrov (SL) notamment en Ethiopie, au Congo Brazzaville et en Côte d'Ivoire :

(I).

CC : Nous avons évoqué les conséquences négatives de la guerre menée par la Russie en Ukraine, ses conséquences en particulier sur le continent africain.

CC : L'extension de la menace terroriste dans le Golfe de Guinée, la multiplication, par ailleurs des changements de gouvernements hors cadre constitutionnel nous inquiètent, comme nous inquiètent le recours croissant à des milices de mercenaires et la pratique croissante, également, de la manipulation de l'information.

SL : L'occident a créé un système basé sur certains principes – économie de marché, concurrence loyale, inviolabilité de la propriété privé, présomption d'innocence... : tous ces

principes ont été jetés à l'égout quand il s'est agi de faire ce que leur semblait nécessaire pour punir la Russie.

SL : Oui, la situation en Ukraine a un effet additionnel négatif sur les marchés alimentaires. Mais pas en raison de l'opération spéciale russe, plutôt à cause de la réaction absolument inadéquate de l'Occident qui a annoncé des sanctions et a déstabilisé la disponibilité de la nourriture sur les marchés.

La dynamique des énoncés ci-dessous démontre une suite de constatation faite par les énonciateurs institutionnels dans un contexte particulier de conflictualité. Cette détermination rétrograde d'évènements tensifs vise à mettre en exergue les actions subversives de l'adversaire-ennemi qui nuit à l'ordre normal et naturel des choses. Dans ce sens, l'usage des procédés de gradation par l'emploi des adverbes d'énonciation "par ailleurs", "comme", "également", ou l'énumération des principes de gouvernance traduisent dans le discours la transversalité des crises énumérées donc de l'ampleur de la capacité de nuisance de l'adversaire-ennemi. Ce dernier apporte une modification négative à la situation initiale (État 1) et induit par la même occasion une transformation (T) non favorable. Ainsi, le modèle narratif sert de socle pour développer le propos de l'énonciateur institutionnel. La transformation (T), en l'occurrence, les crises endogènes au continent et les crises exogènes dont il subit les conséquences servent d'arguments pour le double objectif de positionnement de l'émetteur et de l'endiguement de son adversaire-ennemi. C'est en cela que C. Bremond (1973 : 27) dira que « si l'approche narrative à un apport spécifique, c'est qu'elle propose des différents rôles ; protagonistes, opposant, allié, victime résistant, victime négociant ». Dans cette logique de la construction dis-

cursive dans le déploiement de leur agenda diplomatique, les ministres eurasiens vont usés de mécanismes de la modalité narrative pour préciser le rôle actantiel que devraient assurer les pays africains. En d'autres termes, la structuration de leur discours cherche à mettre en exergue un sujet de faire "adjuvant" qui associé à leur vision du monde procure plus de puissance à celle-ci tout en affaiblissant celle de l'adversaire-ennemi. Soit les énonces :

(II).

CC : Il est important sur ce sujet, et je parle comme je l'ai fait tout à l'heure en amie, il est important sur ce sujet de se souvenir qu'il y a un agresseur et un agressé. Il est important que tous disent à l'agresseur qu'il doit cesser son agression.

CC : La guerre que la Russie mène en Ukraine a des conséquences négatives sur tous les pays de la planète et il est temps, il est important que tous nous nous rassemblions pour porter ce message à la Russie, que ça suffit ! Ce qu'elle fait cause du tort à trop de pays sous toutes les latitudes et qu'il faut maintenant qu'elle ait un autre comportement. A ce titre, nous avons des attentes à l'égard des pays africains. Nous en avons fait part.

SL : Nous apprécions la position africaine réfléchie concernant la situation en Ukraine et dans les environs. Nous savons que nos collègues africains n'approuvent pas les tentatives non déguisées des Etats-Unis et de leurs satellites européens de prendre la tête du mouvement et d'imposer un ordre mondial unipolaire.

SL : Le président Sassou a fait preuve de compréhension vis-à-vis de nos actions. Il comprend bien que l'Ukraine c'est un instrument de l'Occident dont l'objectif est d'infliger une défaite stratégique à la Russie.

Ces énoncés tout en étant prescriptifs, enjoignent leurs destinataires à adopter une posture axiologique bien précise. Cette posture que doit ou devrait prendre les pays africains se démarque comme une ressource essentielle dans la balance de la confrontation des volontés antagonistes. Pour ce faire, les énonciateurs diplomatiques font recours à des micro-actes directifs dont la fonction est de mobiliser l'interlocuteur. Ainsi, les constructions modales telles que "il est important" utilisé à quatre reprises, "il est temps" ou encore "qu'il faut", "nous avons que" matérialisent les intentions dans l'énonciation institutionnelle dans la quête d'allié. A propos des micro-actes directifs dans le discours, V. Allouche (2013 :52) soutient qu'«il s'agit de faire agir quelqu'un, un groupe : proposer une action suggérer une solution à quelqu'un conseiller un itinéraire ». Le genre narratif offre ainsi le cadre matériel et les éléments langagiers qui permettent au discours institutionnel de porter sa cause et de promouvoir sa quête. La sollicitude des puissances eurasiennes à l'égard des pays africains s'enrobe d'une intentionnalité qui contribuera à bénéficier de l'aide de ceux-ci par leur affiliation exclusive. Toute chose qui permettra au protagoniste qui bénéficiera de cette alliance d'avoir de l'ascendance sur son adversaire-ennemi. Qui plus est, permettra à l'état initial (E1) transformé (T) négativement par l'intervention de l'adversaire-ennemi d'être réhabilité pour aboutir à un état final (E2) satisfaisant. Par ailleurs, l'énonciateur institutionnel va orienter son propos vers la promesse de situations heureuses pour lui et allié, si bien entendu, l'adversaire-ennemi est débouté et neutralisé dans son action subversive. C'est dans cette logique les énoncés suivants s'inscrivent :

(III).

CC : Le partenariat entre notre ensemble qu'est l'UE et l'ensemble qu'est l'UA se renforce. Nous sommes voisins, la constitution d'une zone de libre-échange sera un élément décisif de cette intégration. Nous sommes là pour vous aider.

CC : La Côte d'Ivoire va mieux, ses performances économiques sont bonnes. Et nous sommes là, avec d'autres partenaires, pour aider à construire ses progrès remarquables.

SL : Nous avons décidés d'élargir notre chiffre d'affaire. Nous continuerons à aider le Burkina Faso à résoudre les problèmes humanitaire en lui fournissant les produits alimentaires et les engrais russes. Nous fournissons et continuerons de fournir des produits militaires qui assurent la capacité de défense du Burkina Faso.

SL : Nous poursuivons une coopération militaire et militaro-technique intensive dans l'intérêt du renforcement de la capacité de défense de la République du Congo. Dans un avenir proche, un laboratoire russo-congolais conjoint pour la détection et prévention des maladies infectieuses sera créé au Congo.

A la suite de la maturation du propos institutionnel par la recherche d'allié dans la quête de la victoire sur l'adversaire-ennemi, le discours institutionnel va introduire dans sa trame, en conformité avec son socle narratif, l'éventualité d'une promesse, d'une gratification potentiellement bénéfique à l'allié. Cette configuration particulière du discours institutionnel se fait dans la logique d'établir l'état final (E2) après avoir triompher de la transformation (T) négative induite par l'adversaire-ennemi. Pour ce faire, le recours à des micro-actes promissifs devient une caractéristique compositionnelle de cette production. Pour V. Allouche (2013 :23), les micro-actes promissifs dans le discours « ont pour visée d'exprimer des engagements... promettre à

quelqu'un, à un groupe de faire certaines actions, s'engager à faire certaines actions. Dans ce contexte, le producteur se met dans la situation de devoir agir dans le futur ». En promettant à l'allié-adjuvant des éléments qui lui seront bénéfiques, celui-ci veut pousser celui-là à l'action. Cette approche discursive est d'un pragmatisme opérationnel pour l'énonciateur institutionnel. En somme, l'activité discursive des chefs de la diplomatie française et russe en terre africaine s'établit par la médiation de la narration. Cette modalité discursive leur fournit les éléments langagiers de forme pour justifier et mettre en discours leurs visions du monde. Pour M. Angenot (2008 : 277), « les diverses visions du monde diffèrent non par leurs thèmes mais par la façon dont elles sont argumentées et justifiées ». C'est dire que l'existence et la vie d'une vision particulière du monde est tributaire de sa mise en discours et les modalités discursive, ici le narratif, sont les matrices dans lesquelles elles prennent formes. Toutefois, cette ressource d'intelligibilité qu'est le narratif n'est que la première mécanique discursive dont fait usage l'énonciateur institutionnel, la seconde mécanique linguistique dont il use contribuera à donner vie à son intentionnalité ou encore à la visée de son discours.

3. Principe d'élaboration de l'intentionnalité psychosociale dans l'énonciation institutionnelle

Le contexte agonal dans lequel émergent les productions discursives russe et française en terre africaine nous enjoint à interroger le pourquoi et le comment de cette approche diplomatique. Si le comment trouve sa réponse dans la première partie de cette étude, le pourquoi lui trouvera sa réponse dans la visée discursive construite à travers et par la matérialité langagière. En effet, pour P. Charaudeau

(2010 :05), « toute théorie du discours implique que soit déterminée les différents niveaux d'organisation du fait langagier ». Ainsi, les énonciations institutionnelles ne se contentent pas de l'usage particulier d'un genre discursif, ici la modalité narrative, mais également s'assignent dans une ambition de praxie sociale, une finalité psychosocio-communicative. Pour donner vie à cette ambition d'influence psychosociale dans la compétition stratégique qui l'oppose à l'autre, l'énonciateur institutionnelle va faire recourt à une visée toute particulière. Celle de se muer en une instance informative, l'instance qui apporte l'information vraie, en d'autres termes, une mission de contre-propagande. En effet, comme le souligne Y. Grinshpun (2023 :58), « c'est toujours l'adversaire qui use de la propagande... c'est-à-dire la tentative d'influencer les idées en vue de faire triompher une vision du monde et une construction idéologique ». Dans ce cadre, chacun des protagonistes institutionnels se donnent la mission salvatrice de rétablir les principes de fonctionnement de la démocratie mis à mal par l'autre en vue de faire barrage à la propagande adverse. Et ce dans la logique de « répondre à l'exigence démocratique qui veut que l'opinion publique soit éclairée sur les évènements qui se produisent dans l'espace public » (P. Charaudeau 2010: 08). Toutefois, étant établi qu'il existe un lien de causalité entre co(n) texte d'une production discursive et sa finalité, la visée informative d'un discours qui s'assigne une mission de contre-propagande (inhiber l'influence de l'autre en prêchant le vrai) peut lui aussi être propagandiste dans sa mise en scène. En effet, le discours informatif et le discours propagandiste ont en commun d'être déployer dans l'espace public. Leur matérialité langagière peut prêter à confusion, ce qui procure à l'énonciateur une marche de manœuvre qui

donne lieu à des approches manipulatoires. Avant d’en venir à nos analyses, nous allons voir dans le tableau ci-dessous les principes d’élaboration de la visée informative ou propagandiste dans une production discursive :

Composante	Discours informa- tif	Discours propa- gandiste
Objectif	“faire savoir” pour “faire sa- voir”	“faire savoir” pour “ faire faire”
Dispositif	Pas d’instance ad- verse	Instance adverse
Instance locu- trice	- Autorité de sa- voir - Source supposée vérifiable et im- putable “volon- taire”	- Autorité en question - Source vérifiable non imputable “volontaire”
Instance desti- nataire	Bénéficiaire du savoir	- Bénéficiaire au terme d’une ac- tion
Contenus	<u>Objet de savoir :</u> “est” / “a été” Discours sans ap- préciation <u>Type de valeur :</u> “ni bien ni mal”	<u>Objet de savoir :</u> “est” / “a été” Discours apprécia- tif <u>Type de valeur :</u> “bien contre mal”

Tableau des composantes discursives inspiré de P. Charaudeau (2010).

En indiquant les principales composantes du discours informatif et du discours propagandiste, ce tableau nous permet de faire une approche circonstanciée de notre corpus. Dans ce sens, les productions discursives de notre corpus relèvent plus du discours propagandiste que du discours informatif. En effet, les "contenus" qui émergent des discours mis à l'étude arborent des relents axiologiques. Les énonciateurs institutionnels mettent en avant une logique du "bien" prôné par leur vision du monde contre le "mal" résultant de l'approche de l'adversaire-ennemi comme le soulignent les énoncés suivants :

(IV).

SL : La situation actuelle est une tragédie pour le peuple libyen. Et ses malheurs ont commencé en 2011, lorsque l'Occident principalement en la personne des membres de l'OTAN et avec le soutien de Barack Obama, a détruit l'Etat libyen en violation de toutes les normes du droit international y compris les résolutions pertinentes du Conseil de Sécurité sur le règlement libyen.

SL : Des questions nous ont été posées par des représentations de l'Agence France Presse et BBC Afrique. Vous travaillez ici, vous pouvez le faire dans n'importe quel pays. Mais, vos collègues russes sont interdits pratiquement dans toute l'UE. La liste noire des journalistes et des agences entières continue de s'allonger.

CC : Les autorités issues du double coup d'état au Mali ont dû faire recours à des mercenaires, à des milices russes, Wagner, pour les nommer, qui non seulement sont d'une grande inefficacité pour lutter contre les mouvements terroristes, mais qui, elles-mêmes commettent des exactions sur les populations.

CC : La guerre que la Russie a choisie d'engager en Ukraine, elle a des conséquences négatives pour le monde entier. C'est une guerre cruelle et qui dure mais il y a des conséquences économiques pour l'ensemble des pays du monde, évidemment pour l'Afrique.

Ces énoncés traduisent le relent propagandiste des productions discursives institutionnelles française et russe en terre africaine. Ces énonciateurs institutionnels se donnent pour rôle de manière "volontaire" en effet d'instruire leurs interlocuteurs sur la nature réelle (nature dissimulée) de leur adversaire-ennemi. En le faisant, il assigne une mission axiologique à leur production discursive, celle de mettre au grand jour les contre valeurs (le mal) qui sous-tend les actions de l'adversaire-ennemi. En mettant en exergue les actions subversives de l'autre, en l'occurrence, "la destruction d'un Etat", "la censure de la presse", "la cruauté de la guerre et ses conséquences" ou encore "les exactions contre les populations", ces discours veulent non seulement « faire-savoir » les dérives de l'instance adverse dans l'objectif de « faire-penser ». La recherche de l'influence dans cette logique passe alors par la subtile approche praxéologique de « faire-penser » pour « faire-faire ». Les opinions publiques et politiques africaines sont ainsi soumises à des pratiques langagières d'influence indirectes qui visent plus à émouvoir qu'à faire réfléchir. Par ailleurs, ce discours propagandiste institutionnel dans la logique de son mécanisme langagier du « faire-savoir » pour « faire-faire » va laisser entendre à son interlocuteur son souci de militer pour le « bien » contre le « mal ». En d'autres termes, l'idéologie prônée par l'énonciateur institutionnel serait bénéfique à son interlocuteur. Dans ce sens, il s'efforce de faire

miroiter à celui-ci le bon côté de l'histoire en somme. Soit les énoncés :

SL : Nous soutenons constamment et fermement les justes revendications des pays africains qui veulent se débarrasser des vestiges des pratiques désormais néocoloniales poursuivies par les anciens colonisateurs.

SL : En ce qui concerne l'agriculture, la production d'engrais et de produits pharmaceutiques, nous continuerons à aider le Burkina Faso à résoudre les problèmes humanitaires en lui fournissant des produits alimentaires et des engrais russes.

CC : Nous sommes favorables à la réforme du Conseil de Sécurité depuis bien longtemps. La France, vous le savez, nous vous l'avons redit aujourd'hui, est favorable à ce que cette réforme du Conseil de Sécurité inclut une représentation du continent africain tant pour les sièges des membres permanents que pour les sièges des membres non permanents.

CC : Vous savez que nous reprenons votre slogan et nous défendons les solutions africaines aux crises africaines. Nous sommes là pour vous aider.

Ces énoncés dans la logique du discours propagandiste mettent l'instance destinataire dans la posture de celle qui est et qui sera bénéficiaire des actions de l'énonciateur institutionnel. Ainsi, la bataille pour l'influence de l'espace politique et social africain amène les ministres français et russe à faire usage d'une approche de séduction qui en réalité traduit l'ambivalence dans laquelle ces pays se trouvent en Afrique. En mettant en exergue les retombées de leur présence dans les pays africains, ils ne mentionnent nullement ce qu'eux-mêmes gagnent dans ce partenariat. Leurs productions discursives font recours à des stratégies de simplification qui évitent à l'énonciateur de faire des démonstra-

tions logiques qui pourraient lui être coûteuses. Ainsi, les syntagmes affirmatifs tels “vous le savez”, “vous savez”, “nous sommes là” et les syntagmes affectifs “nous soutenons”, “les dirigeants... apprécient” tout en mettant l’instance réceptrice au cœur de l’acte discursif, permettent à l’instance émettrice d’essentialiser son propos, en visant directement sans explication logique l’affect et l’approbation du destinataire. Toute chose qui est caractéristique des mécanismes du discours propagandiste. Cette subtile approche de création des conditions d’influence voilée par le discours est ainsi consubstantielle aux propos institutionnel dans les situations de conflictualité ouverte et de recherche d’ascension sur l’adversaire-ennemi.

4. Sensibilité de l’espace sémantique africain aux approches d’influence extérieure

Bien que l’Afrique ait été pendant longtemps au cœur des manœuvres géostratégiques des grandes puissances, les relations du continent africain avec celles-ci ont évolué avec le temps au gré des réalités sociohistoriques et sont aujourd’hui à la croisée des chemins. En dépit de cette évolution, certaines puissances continuent de voir l’Afrique comme un terrain d’extension de leur vision politique. Ces méharistes contemporains semblent venir à la conquête du désert africain créant ainsi un champ de conflit idéologique donnant lieu à un espace sémantique par le biais de leur confrontation discursive. Selon N. Genty (2024 :07), « l’espace sémantique d’un conflit social émerge avec ce conflit en constituant une zone d’intervention des discours...afin de renforcer ou diminuer des entités sémantique ». La production discursive institutionnelle des ministres français et russe crée dans ce sens un espace sémantique

tique astreint aux idéologies de chacune des parties prenantes française et russe par le biais de leurs actions et stratégies discursives. Toutefois, cette tentative des interventions discursives eurasiennes de modifier l'espace sémantique africain en leur faveur trouve une réponse contrastée. En effet, les défis nouveaux auxquels sont confrontés les Etats africains les amènent à adopter de nouvelles formes d'expression dans les relations bilatérales. La diversification des partenariats dans la logique de la recherche de nouvelles opportunités socioéconomiques semble être devenue la norme au cœur des relations extérieures. Les questions liées aux prises de positions idéologiques et à l'affiliation à un bloc spécifique sur la scène internationale sont plus en plus relayées au second plan. Si les Etats africains restent ouverts aux anciens partenaires avec lesquels ils sont liés par l'histoire, en l'occurrence, la France et la Russie, il n'en demeure pas moins qu'ils s'ouvrent également à de nouveaux partenariats. L'exclusivité dans le partenariat et le suivisme idéologique sont ainsi en perte de vitesse. Pour R. Schierer, L. N'Dikumana et P. Walkenhorst (2011 : 03),

« l'Afrique est en pleine mutation, notamment avec la venue de nouveaux partenaires... qui jouent un rôle de plus en plus important en procurant du financement et du savoir-faire qui sont essentiel au développement de ce continent ».

Autrement dit, la nouvelle dynamique qui régit la vision diplomatique des Etats africains est orientée vers la recherche de réponses concrètes aux besoins du continent. Cette nouvelle posture africaine se démontre dans la régulation particulière de ses relations postcoloniales. Au-delà du lien historique avec le partenaire, elle consiste à prendre en compte l'intérêt actuel du continent dans les relations bilaté-

rales. Ainsi, l'espace sémantique africain développe une sensibilité dualiste face aux tentatives de modifications entreprises par la production discursive française et russe. Les pays africains ne souhaitent plus se situer au cœur de la conflictualité entre grandes puissances tel que ce fut le cas pendant la période de la guerre froide où il fallait choisir idéologiquement un camp. Cette nouvelle posture africaine s'exprime bien dans les propos du ministre des Affaires Etrangères du Tchad en ces termes : « pourquoi nos relations avec la Russie vont remettre en cause nos relations avec la France ? Nous ne sommes l'otage de personne, ni de la France, ni de la Russie, ni de la puissance d'aucun pays ». C'est dire que l'offensive diplomatique des ministres eura-siens en terre africain n'a pas créé des rapports d'exclusivité et de prise de position dans la conflictualité qui oppose ces deux puissances.

De plus, le relent propagandiste de la production discursive des ministres français et russe voile mal l'approche condescendante qui sous-tend leur production. Cette propagande active est sous-tendue par un contrat de communication où les rôles définis place l'interlocuteur africain dans une posture de maillon à instruire. Dans cette logique, l'acte discursif engagé par les énonciateurs institutionnels exclu l'approche de co-construction du but de la communication. Subséquemment, certains partenaires de l'échange langagier, en l'occurrence, la partie africaine, ne se reconnaissent pas dans la finalité de l'acte de la communication qui devrait surdéterminer les partenaires de l'échange. C'est dans ce sens que s'inscrivent les propos du président ivoirien Alassane Ouattara quand il souligne qu'« il faut qu'on se dise que nous avons une génération de chefs d'État et une jeunesse maintenant qui connaissent ses responsabilités et

qui estiment que nous ferons ce qui est bien pour nos pays, pour nos peuples. Nous ne voulons pas l'importation d'idéologie, ni de culture ni de constitution, etc... ». Cette position illustre bien ce qu'est dans les faits la nouvelle dynamique africaine dans la gestion des relations bilatérale. C'est dire que l'espace sémantique africain ne se veut plus comme un champ d'affrontement des visions étrangères aux réalités du continent. Bien que le continent ne soit fermé à aucun partenaire, les relations issues du post-colonialisme ne sont toutefois plus au premier rang. Pour preuve, les nouveaux partenaires tels que les BRICS s'affirment un peu plus sur le continent, notamment, sur le plan économique en apportant des solutions concrètes aux besoins africains, notamment, les financements, les infrastructures, la savoir-faire etc..... Ce qui donne lieu à un rééquilibrage des influences sur le continent et entérine la perte d'influence des partenaires traditionnels, en l'occurrence, la France et la Russie. Ces partenaires traditionnels du continent gagneraient à appréhender leur relation avec l'Afrique en dehors de leur opposition idéologique et conceptuelle et l'orienter plus vers un partenariat économique profitable à toutes les parties.

Conclusion

Les productions discursives institutionnelles dans le cadre diplomatique entre entités étatiques sont porteuses de la réalité des rapports de force symbolique et d'influence idéologique. Nous nous sommes penchés dans cette étude sur la production discursive institutionnelle en terre africaine de deux grandes puissances européennes ayant avec le continent des liens historiques, notamment, la France et la

Russie dans le contexte d'une offensive diplomatique menée par leurs ministres des Affaires étrangères. Offensive entreprise dans un contexte de crises multiformes tant sur le continent africain qu'en dehors, emmenant ces pays à venir plaider leurs causes en Afrique pour d'une part consolider leur position et d'autre part endiguer celle de l'autre considéré comme adversaire-ennemi. Pour ce faire, nos analyses se sont fondées sur les théories de l'analyse du discours portées par J.M. Adam et P. Charaudeau qui se caractérisent non seulement par la mise en exergue des genres discursifs institutionnalisés mais aussi par l'examen de la visée communicative de ceux-ci. Ainsi, les discours institutionnels des chefs de la diplomatie française et russe se situent en global dans la modalité discursive narrative. Cette modalité offre à l'énonciateur institutionnel les éléments de construction de son propos en s'attribuant à lui-même le rôle mélioratif tout en affublant son adversaire-ennemi du rôle péjoratif. Le narratif dans ce contexte met à la disposition de l'énonciateur institutionnel les éléments langagiers qui lui assurent un positionnement favorable vis-à-vis de son interlocuteur et lui permet d'endiguer l'influence de son adversaire-ennemi. Dans cette logique de positionnement, les mécanismes de la visée de cette production discursive portent à confusion quant à leur appartenance à la visée informative ou à la visée propagandiste. A l'analyse, nous avons mis en exergue que l'approche discursive dont fait usage ces énonciateurs institutionnels sont consubstantielle à la visée propagandiste. Et enfin, l'impact de cette production discursive sur l'espace sémantique semble contrasté. En effet, l'Afrique se veut désormais mondialisé et elle milite activement à la recherche et à la préservation de ses intérêts propres dans une logique de relations multilatérales. La période de

l'exclusivité bilatérale et du suivisme idéologique qui ont fait date dans les stratégies des grandes puissances vis-à-vis du continent africain sont de plus en plus mis en causes par les pays africains. En somme, nous retenons que les rapports de la France et de la Russie avec le continent africain ne doivent plus s'envisager sous les auspices de la conflictualité qui oppose ces deux puissances sur le plan idéologique. Ces rapports doivent plutôt se construire sur les projections des intérêts économiques mutuels des parties africaines et eurasiennes sans actions subversives d'influence idéologique et de volonté d'orienter les prises de position des pays africains sur la scène internationale.

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Le discours de la libation chez le peuple baoulé : analyses linguistique et socioculturelle.

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Résumé :

L'article analyse le discours de la libation et son fonctionnement dans le paysage rural baoulé. En effet, cette étude s'inscrit dans une perspective, dégagant ainsi les caractéristiques du discours de la libation. Au regard des caractéristiques que chaque forme de discours présente, celui de la libation renferme quelques notions qui s'apparentent au discours narratif. Suivant cette perspective que l'article dégage les composantes linguistiques du discours de la libation en se basant sur les approches théoriques de la séquentialité narrative de J M Adam et l'identité culturelle de Chaudenson. L'implication de ces approches théoriques explique clairement certains mots techniques du discours de la libation, montre la richesse linguistique de la langue baoulé et du fonctionnement du discours de la libation dans le paysage rural baoulé.

Mots-clés : libation, discours, baoulé, linguistique, socioculturelle.

The speech of libation in the baoulé people : linguistic and socio-cultural analysis

Abstract :

The article analyzes the discourse of libation and its functioning in the baoulé rural landscape. Indeed, the study is part of a perspective, giving off the characteristics of the discourse of libation. In view of the characteristics that each form of discourse presents that of libation, that of libation contains some notions which are similar to narrative discourse. Following this perspective, the article gives off the linguistic components of the discourse of libation based on the theoretical approaches of the narrative sequence of J M Adam and the cultural identity of Chaudenson. The involvement of these theoretical approaches help to explain certain technical notions of the discourse of libation and to show the linguistic richness of the baoulé language and the functioning of the speech of libation in the rural landscape.

Keywords : libation, speech, baule, socio-cultural

Introduction

Chaque société se distingue par sa culture et les individus interagissent selon leur tradition. Les sociétés en général organisent des manifestations telles que le baptême, le mariage coutumier, la danse traditionnelle, l'anniversaire etc...) pour donner de l'importance à ce qu'elles font. Les manifestations sont qualifiées de "*fait culturel*". D'après Emile DURKHEIM (1895), le fait culturel obéit à trois (3) caractéristiques que sont *la coercitivité* qui répond à ce qui est contraint, elle s'oppose aux individus ; *la généralité* elle s'applique à tous les hommes vivant en société ; et *l'antériorité* quant à elle tient compte de ce qui existaient et qui se perpétue de génération en génération. Les initiatives culturelles chez certains peuples autochtones comme chez les baoulé nécessitent des

libations. Selon DIANDUE Bi Pa¹. (2023 : 1), la libation est un rituel de cérémonie qui se départi des dogmes en lui restituant l'essence et la symbolique. Mieux, les baoulé avant de commencer une cérémonie font une libation. Cette libation est accompagnée de discours. Jean Michel Adam (1989), soutient que, (...) le discours est un énoncé se caractérisant non seulement par les propriétés textuelles aussi comme un acte de discours déjà accompli dans une situation qui prend donc en compte les participants, les institutions, le lieu, le temps etc. La logique est l'une des facettes du discours : une signification de pensée. Le discours pour sa part entre dans une contextualisation en s'orientant sur un aspect du fait social. Au regard des formes de discours (injonctif, informatif, descriptif, narratif, explicatif et argumentatif), celui de la libation présente ses caractéristiques qui peuvent se similariser ou se différencier des autres formes et peut s'affirmer comme un discours reconnu comme ceux que nous connaissons. Si nous partons du fait que tout discours s'interprète, il n'en demeure pas moins que les langues africaines posent le problème de scientificité, de polysémie et la complexité consonantique. A ceux-ci, s'ajouter l'insuffisance de théories linguistiques quant à l'explication de certains faits linguistiques. Cet état de fait, limite donc les compréhensions de certaines notions sémantiques et pose le problème de description des langues vernaculaires. De ce fait, interrogeons-nous de savoir comment analyser le discours de la libation tenue à l'occasion des faits de société chez le peuple baoulé ? Par ailleurs, le discours de la libation correspond-t-il à laquelle des formes de discours sur-mentionnés ? Dans cet article, nous tâcherons de mettre en lumière les composantes

¹ La libation ou la symbolique de la récréation du monde, pour une mythologie de l'ordinaire, 23 Mars 2023

d'un tel discours tout en l'illustrer avec l'une des formes de discours.

1. Approche théorique

Dans cette partie, nous exposons l'approche théorique qui sous-tend notre étude ainsi que le corpus qui nous a permis d'explorer notre problématique. Parlant de discours de la libation, il s'agit pour un individu qui raconte, sans toutefois faire le récit d'un fait. De plus, la diction du discours de libation est une compétence de communication.

1.1. La théorie narrative de Jean Michel Adam (1985)

Au XXème siècle (en 1980), (Fisher 1984), propose la narration comme univers de la communication de l'homme. Il soutient dans sa définition de l'homme comme un *homo sapiens* et comme un *homo narras*. Il pose que la narration humaine doit tenir compte de deux phénomènes : l'historique et le contextuel ; dans laquelle ces deux phénomènes compétiennent. Ces narrations amènent donc les Hommes à établir, pour eux-mêmes et pour les autres, la signification du monde dans lequel ils vivent. La notion de narration porte par moment plusieurs noms que sont : l'histoire, le conte, la saga et le récit. Ces concepts sont souvent utilisés indistinctement. La narratologie, qui pour sa part, étudie les structures narratives, aborde les récits de deux manières : comme un texte ou un énoncé ou comme un acte de communication (une énonciation) et qui est aussi associé à une « performance » en situation. Selon (Brown) (1987), cité par Nicolas Giroux et Lisette Marroquin (2005, p.7), la narration présente ce que rencontre un agent à travers des événements qui se déroule dans un temps long ou court. Ces événements impliquent un procès de transformation et comporte selon (Reuter) (1997), plusieurs étapes : situation initiale, appari-

tion d'un élément perturbateur, le nouement provoquant une succession d'actions qui amène à la résolution, soit par le dénouement, et enfin, l'atteinte d'un état final. La narration est donc le récit d'une transformation ou d'un changement. Par quelques caractéristiques identiques, le discours narratif et le discours de libation présente des similitudes. Mieux, les caractéristiques du discours narratif peuvent être identifiées dans le discours de la libation.

1.2. Théorie de l'identité culturelle (1998)

D'après Mariette Théberge (1998), l'identité culturelle est ce par quoi se reconnaît une communauté humaine (sociale, politique, régionale, nationale, ethnique, religieuse,...) en termes de valeurs, de pensées et d'engagement, de langue et lieu de vie, de pratiques, de traditions et de croyances, de vécu en commun et de mémoire historique.

La théorie culturelle de la sociolinguistique est fondée sur l'identité culturelle, les représentations linguistiques ainsi que les attitudes. Selon cette théorie les groupes sociaux manifestent leur identité culturelle par les éléments de la langue comme les chants, les légendes, les récits mythiques etc... La théorie de l'identité culturelle a été initiée par (Chaudenson, 1992). C'est donc dans cette dernière que s'inscrit notre étude, en ce sens que la manière dont les discours sont dits, date depuis la période de sacrifice de la reine Pokou fait sur le fleuve. De plus, cette théorie peut décrire et intervenir dans l'analyse de notre étude d'autant plus qu'en parlant de discours de libation, il s'agit d'un semblant de récit, voire un récit mythique. Cette dernière peut donc nous aider à analyser le discours de la libation chez le peuple baoulé.

2. Constitution du corpus d'analyse

Le corpus sur le discours de la libation a été recueilli avec un dictaphone (en audio) lors des faits culturels et traditionnels auprès d'un sous-groupe (kôdè) du baoulé. Le discours se présente comme une sorte d'échange entre celui qui prononce les paroles et les acteurs qui assistent à ce fait social. En revanche, les acteurs n'observent pas d'effet de feedback. Elles ne sont pas imaginaires donc loin d'être une fabrication humaine. De plus les différentes situations de communications ont pris forme dans un environnement naturel social.

Les données recueillies sont parvenues en qualité audio. Il fallait donc la transcrire et permettre qu'elle garde toute son originalité. En voici un extrait de discours de libation :

*« Je Nãñã mu, je vje anumã, je vje wa, je vje niã bjã.
Neki'n ε fah bla, ah wu ba, neki'n ti me fitele tɛ̃, me
swa fite. Kpɔfue, duwɛfue, bahefue, ɲa ba ; ba ɲa me
swa fite'ɲ, ε ti'e klun su, je jœ likeɲ, nzã ɲa um maã
mu le, amu nɔ naã amu sje sɔ fue vje ».
Ba ɲa ba le, jã mwaje, jã sika. E baba wun sãdi naã,
ah khwa ba lika njã. »*

Chaque forme de discours présente ses caractéristiques propres à lui. Dans le discours narratif, il s'agit d'une personne qui parle (raconte un fait). Il en est de même pour le discours de libation dans lequel une seule personne parle. Sur la base du fait que dans le discours narratif et le discours de libation, c'est une seule personne qui parle, nous pouvons, avant de l'affirmer, illustrer le discours de libation par le discours narratif.

2.1. Illustration du discours de la libation par le discours narratif

Pour Jean Michel Adam cité par Raymond Blain (1995), le type narratif est structuré suivant cinq étapes : la situation

initiale, la complication, les actions, la résolution et la situation finale. Les principales caractéristiques textuelles qui distinguent le type narratif sont la présence d'au moins un personnage qui pose un certain nombre d'action dans le temps et dans l'espace. Ces actions sont en relation de cause-conséquence et se situent dans un début, un milieu et une fin. C'est donc une sorte de récit relaté par un narrateur. A l'intérieur donc d'un récit, on a des personnages principaux et secondaires, un narrateur et un narrataire, une action, des péripéties, et quelques indices grammaticaux.

2.2. Identification de quelques éléments clés du discours narratif à travers le discours de la libation

Le discours de la libation est prononcé par un chef de terre qui énonce le récit d'un fait. Ainsi, voici quelques éléments clés du discours narratif identifiable à travers le discours de libation.

2.2.1. Le narrateur du discours de la libation

S'agissant du discours de la libation, ici le narrateur est le chef de terre qui est aussi le gardien de la tradition. C'est lui qui tient le discours.

2.2.2. Le narrataire du discours de la libation

Un narrataire est celui à qui est adressée une narration. Le discours de la libation est adressé aux **ancêtres, aux dieux**.

2.2.3. Les personnages du discours de la libation

Les personnages de la libation sont les acteurs qui sont en honneur dans une situation. Dans le cadre d'un discours de libation, le personnage principal, lors du baptême, est le bé-

bé. Le **père** et la **mère** du bébé (acteur principal) sont à leur tour, les acteurs secondaires ainsi que **l'assistance**.

2.2.4. *Les actions dans l'énonciation du discours de la libation*

Ce sont les différents actes posés par le chef de terre dans l'énonciation du discours qui va donner lieu à des manifestations. Alors qu'il prononce son discours, un grand vent de tourbillon emportant chaises et bâches, surgit sur le lieu de la libation. Ce phénomène témoigne du mécontentement des "esprits (*wawε*)".

2.2.5. *Les péripéties dans la diction du discours*

L'ensemble de tous les bouleversements (grand vent, forte pluie subite sur le lieu de la libation) dans la diction du discours sont considérés comme péripéties du récit mythique.

2.2.6. *Le schéma actanciel dans le discours de la libation*

Les éléments constitutifs du schéma actanciel se déclinent en quatre (4) éléments à savoir :

- **Les opposants dans la prononciation du discours**

Les esprits malfaisants qui sont au centre des bouleversements (tourbillon, pluie subite etc.) dans la faisabilité de la libation.

- **Le sujet dans la diction du discours**

Le sujet est celui qui mène une action. Dans ce cas, le sujet ici est le chef de terre.

▪

Les adjuvants dans la diction du discours

Ce sont les personnages ou forces qui aident le héros. En ce qui concerne le discours de la libation, il s’agit des ancêtres et l’assistance qui peuvent s’y opposer.

▪

L’objet du discours

Ce qui motive le héros à réaliser quelque chose. En l’occurrence, le chef de terre est pour le respect des dogmes traditionnels.

2.3.

Les indices lexicaux et grammaticaux du discours de la libation

Dans le discours de la libation, nous avons une dominance du présent, du passé composé et du futur qui sont les temps par excellence dans le discours de la libation : le temps des verbes dans le discours de la libation), les compléments circonstanciels de temps et de lieu :

Après analyse, ci-dessous les caractéristiques du discours de la libation résumées dans ce tableau :

Intention de celui qui parle	Forme de discours	Principales caractéristiques	Indices grammaticaux et lexicaux
-Demander l’assistance des esprits dans la célébration des faits culturels -Bénédiction	LIBATION	•Un locuteur qui s’adresse à ses ancêtres devant l’assistance. •Une séquence ritualisée : paragraphe1 (Ou-	•Compl.Circ. de temps (Neki’n : aujourd’hui, ce jour-ci). •Temps verbaux : Le présent (klo :

-Bon déroulement de l'événement .		verture : fonction phatique et motif de la libation) Paragraphe2 (corps du discours : chasser les esprits qui essaierais de s'opposer à la cérémonie) Paragraphe3 (Clôture obligatoire : doléance et vœux fait aux ancêtres)	aime ; katfi : transforme ; jo : faire) et le passé composé sont les temps dominant. • Les présentatifs (wœɲ : voici, voilà etc.) • Des expressions figurées et des termes traditionnels (duwle : sort, nãñã : ancêtres etc.)

2.4. Contenu du discours de la libation

La structure interne d'un discours concerne toutes les composantes syntaxiques et sémantiques sur lesquelles s'appuient les indices lexicaux et grammaticaux.

2.4.1. L'unidirectionnalité du discours de la libation

L'unidirectionnalité renvoie, à ce qui est fait dans un seul sens. Pour ce qui est de la communication, elle va dans une direction. Par exemple, la télévision envoie le message à ses téléspectateurs, elle n'attend rien en retour de leur part. Au regard de ce corpus (1) ci-après :

(1.) « (...) » *Je Nãñã mu, je vje anumã, je vje wa, je vje niã bjã.*

Neki'n ε fah bla, ah wu ba, neki'n ti me fitele tʃẽ, me swa fite. Kpɔfue, duwlefue, bahefue, ɲa ba ; ba ɲa me

*swa fite'n, ε ti'ε klun su, je jœ likeŋ, nzã ŋa um maã
mu le, amou nã naã amu sje sɔ fue vje ».*

*Ba ŋa ba le, jã mwaje, jã sika, ε wun sãdi naã, ah
klwa ba lika njã.*

*Ba ŋa ba le, ε baba jã moyé, ε jã sika ε jã awunsãdje
naã ah klwa ba lika njã. Nzã ŋa je maã mu le, ε katfi
sika, baffε. »*

Nous voyons que des idées s'enchainent le long du discours. Les idées sont celles d'un particulier. De plus, il y a absence des indicateurs d'échange tels que les tirets (-), les deux points (:), les points d'interrogation et d'exclamation (? , !), les 3 points (...) dans la parenthèse en début de discours.

L'absence des indicateurs d'échange dans ce discours de la libation montre qu'il s'agit du monologue d'un particulier. Aussi, la présence des guillemets (de part et d'autre) et (...) justifie qu'il s'agit d'une intervention.

2.4.2. La politesse linguistique du chef de terre

La politesse linguistique apparaît comme un moyen de concilier le désir mutuel de préservation des faces.

(2.) « *« Je Nãã mu, je vje anumã, je vje wa, je vje niã
bjã. Neki'n ε fah bla, ah wu ba, neki'n ti me fitele tʃẽ,
me swa fite. »*

Dans l'énoncé (2), l'élément en gras représente la fonction phatique dans l'entame du discours de la libation. Ce qui veut dire « Nos ancêtres »

(3.) « *Ba ŋa ba le, ε baba jã moyé, ε jã sika ε jã
awunsãdje naã ah klwa ba lika njã. Nzã ŋa je maã mu
le, ε katfi sika, ba fje. »*

Dans l'énoncé (3), les éléments soulignés se refont à des doléances que le chef de terre fait à ses ancêtres. « La boisson que je vous offre se transforme en succès »

Dans l'énoncé (2), la fonction phatique exprimée en gras montre efficacement la marque de considération que les populations rurales accordent à leurs ancêtres.

Au niveau de l'énoncé (3), ces doléances faites à leurs ancêtres témoignent de la primauté que ce sous-groupe a de leur divinité.

2.4.3. *L'indexicalité du discours de libation*

Elle exprime l'idée selon laquelle le sens de toute chose est attaché à son contexte. Les déictiques comme ici, maintenant, derrière, je elle nous...) par exemple sont les mots identiques pour tous ceux qui les prononcent mais, renvoient pour chacune de leur utilisation à un contexte unique. En effet, dans les échanges langagiers ordinaires, le sens de certaines expressions (« ici », « je », « vous », « cela » ...) ne peut être défini hors du contexte de leur usage : il est « indexé » à ce contexte. Ce phénomène est récurrent dans notre corpus. Des exemples seront mentionnés en guise d'illustration :

(4). Neki'n ti me fitele tʃẽ
/aujourd'hui. / / être. / / Eux, ils. / /Sortir + progressif. / /jour/

« Aujourd'hui c'est leur jour de sortie »

(5). Neki'n ε fah bla ah wu ba
/Aujourd'hui. / /il. / /prendre. / /femme. / /Il. /
/accoucher/ /ba/

« Aujourd'hui il a fait un enfant »

(6). Je nã nã mu, je vje anumã,
wa, nja bjã
/Nos/ /ancêtres/ /vous/ /nos/ /aussi/ /petit-fils/
/enfant/ /frère/

« Nos ancêtres, petit-fils pour les uns, et enfant ou frère pour les autres »

(7). Ba ɲa ba le
/Enfant/ /qui, que/ /venir/ /là, ici/

« *L'enfant est né* »

En (4) « *Neki'n* » et « *tjẽ* » sont deux mots qui veulent dire la même chose d'un point de vue contextuel et une répétition du mot « *neki'n* : aujourd'hui ». La répétition de ces mots montre qu'il se déroule un événement à ce jour. En (5) « *bla*=femme » et « *ba* : nouveau-né » présente deux catégories d'être. C'est deux catégories dans l'énoncé, sont les éléments à l'honneur en ce jour de la manifestation. De plus, dans l'énoncé (6) « *Nãã* (ancêtres) » sont les "dieux" ancestraux évoqués pour le bon déroulement de cette initiative. Les mots dans les énoncé (6) « *anumã*=petit fils », « *wa*=enfant » et « *njã bjã*=frère » sont d'autres personnes concernées dans la description de l'événement. Enfin, les phrases des énoncés : (4) « *neki'n ti me fite le tjẽ*=aujourd'hui, c'est leur jour de sortie », énoncé (5) « *neki'n ε fah bla, ah wu ba* = il s'est marié, il a fait un enfant », (6) « *je nãã mu, je vje wa, je vje anumã, je vje njã bjã* = nos ancêtres, enfant pour les uns, frère et petit-fils pour les autres » et énoncé (7) « *ba ña ba le* = l'enfant qui est né » sont les mots mis ensemble dans un contexte.

Cela montre qu'il s'agit de la célébration d'un fait culturel. Chacun de ces mots employés dans le récit indique ce dont il est question. N'étant pas sur les lieux, par l'emploi des mots le démontrent.

3. Les actes locutoires du discours de libation

Il s'agit de la combinaison des sons, l'associativité des mots et expressions qui ont un sens dans la langue. Il s'agit des expressions figurées, des interjections postposées et les présentatifs.

3.1. Des expressions figurées

Entendons par expressions figurées, le sens particulier d'un énoncé ou d'un élément linguistique que lui confère son contexte situationnel. Elles expriment donc une autre réalité, autrement que ce qui est exprimé dans un énoncé. Par exemple l'énoncé : « *Avoir l'estomac au talon* » ne veut pas dire qu'effectivement on a cet organe du corps humain qui nous traîne au talon, plutôt c'est d'« *Avoir faim* ». C'est ce fait là que nous allons dégager dans ce corpus. Suivons donc ces expressions qui suivent :

(5). Nzã ɲa um maã mu lɛ, ɛ katʃi sika.

/Boisson/ /que, qui/ /je, moi/ /donne/ /vous/ /là/ /il/
/transforme/ /argent/

« *La boisson que je vous offre se transforme en argent* »

(6). Amu kɔ kã ndɛ'ɲ sɛ ah lɛ jo fɛ'ɲ saah
si'nh.

/vous/ /aller/ /parler/ /affaire/ /si/ /il/ /le tien/
/fait/ /doux/ /reviens/

« *Allez-y en parler, si tu as raison, reviens parmi nous* »

(7). Wu lo ekun.

/mourir/ /là-bas/ /encore/

« *Meurs là-bas de nouveau* »

L'énoncé (5) : /n'zan=boisson/ /n'ga=que, qui/ /um=je, moi/ /maan: donne/ /lê=la/ /mou/ /êh=il, cela/ /katchi=transforme/ /sika=argent/

Contexte=/la boisson que je vous offre se transforme en argent. Ici, l'élément à analyser est : « èh katchi sika ». La signification de cet énoncé renvoie carrément à une autre réalité.

La signification globale : « Que la prospérité règne ». Nous avons qu'une simple prononciation de parole, cette parole ne peut faire gagner de l'argent à quelqu'un. C'est une autre réalité que cet énoncé met en lumière.

L'énoncé (6) : /amou= vous/ /ko=aller/ /kan=parler/
/n'dè=affaire/ /sai=si/ /ah=ton, toi/ /yo=fait/ /fè=doux/
/saah=retourne/ /si'nh=derrière/.

Littéral = /vous allez parler affaire si toi fait doux retourne derrière/

Contexte= /allez-y juger l'affaire si tu as eu raison revient parmi nous/. Cet énoncé concerne quelqu'un qui n'est plus et des paroles lui sont évoquée pour le repos de son âme. Nous sommes tous sans savoir qu'un mort ne revient pas. De même pour l'énoncé (7) : /wou=meurt/ /lô= là-bas/ /ekoun=de nouveau, encore/.

Littéral= /meurt là-bas encore/. Les significations littérale et contextuel sont identiques. L'énoncé veut dire "le repos en paix du défunt".

A l'instar des langues européennes, la langue baoulé possède des expressions renvoyant à une autre réalité.

3.2. Les interjections postposées

Elles renvoient aux petits mots placés en fin des mots et contribuant à leur sens. A travers ce corpus, ces petits mots sont récurrents. Pris eux seul, ces mots n'ont pas de sens. Suivons l'illustration (8), (9) et (10) ci-dessous :

(8). Kɔ kã ndɛ'ɲ.

/Aller/ /dire/ /l'affaire/

« Vas en parler »

(9). Anwã ɲa wœ'ɲ sa su.

/La porte/ /que, qui/ /voici/ /comme cela/ /sur/

« Sur cette porte que voici »

(10). Ndɛ ɲa ɛ kã'ɲ klo fah su.

/L'affaire/ /que/ /il/ /dire/ /village/ /prendre/
/dessus/

« Que le village respecte ses dits »

Ces interjections sont situées respectivement en position médiane : les énoncés (9), « weu'gn=voici, voilà », (10)

« kan'gn=parle ». Ces interjections sont aussi placées en position finale : En énoncés (8) « awôli'gn » composé de « ah=tu », « woli=s'en aller » et (8) « n'dè'gn=l'affaire ».

Nous avons une fréquence de ces petits mots : des consonnes complexes montrant que nous avons affaire à une langue africaine précisément le baoulé. Ces interjections témoignent de la réalité du ton mis en utilisation quand le chef de terre parle. Ces interjections convoient la compréhension des énoncés dans le discours.

3.3. Les syntaxes sous la gouvernance des présentatifs.

Nous appelons les présentatifs, des mots ou des groupes de mots désignant les personnes ou choses. Elles désignent particulièrement ce qui est plus ou moins éloigné. D'après l'énoncé (11) : « amu lje wœ'n »

Les présentatifs sont : « voici, voilà ». Dans l'énoncé (13), le mot souligné est un présentatif : / amou liè *wœ'gn*/ on a : /amou=vous/ /liè (désigne l'appartenance) / /*wœ'gn*=voici, voilà/. Cet énoncé désigne donc « avoir droit à ... ». Cet énoncé est introduit par le présentatif « *wœ'gn* ». Ces présentatifs désignent ce dont il est question. Ils permettent ainsi de montrer les acteurs qui constituent et présentent le discours de la libation.

En dehors de ces actes locutoires, la structure externe du discours de libation nous permet de comprendre le sens des énoncés qui construisent le discours de libation.

2.5. La structure externe du discours de la libation

Le discours dans sa composante possède des paragraphes que nous essaierons de distinguer. Soit ce corpus ci-après :

(12). « *Ye baba mou, neki'n kpingbin n'ga me di'nh êh to me. Êh to ye anouansou-anouanssou.*

Neki'n kpingbin ah to amou anouansou kon. Eh fi anouan n'ga weu'gn sa su. Yèh kpingbin gna teu. Néki'n n'ga weu êh ti bia su tranloua.

Balai n'ga ye ba'gn kpofoû douwlêfoû bahefoû, ye fah ba ye sié lê êh ti'êh klou su, n'zan n'ga ye maan mou lê, amou non amou sié vié.

Djouman n'ga êh ni klôfoû me saah di lê êh yan moyé, n'dê n'ga êh kan'gn klo fah su. N'zan yé man mou êh bo weu'gn. Eh katchi ba fiè. »

Ce discours dispose de trois (3) paragraphes :

Paragraphe 1 (L1 -L3): « *Ye baba mou, neki'n kpingbin n'ga me di'nh êh to me. Êh to ye anouansou-anouanssou. Neki'n kpingbin ah to amou anouansou kon. Eh fi anouan n'ga weu'gn sa su. Yèh kpingbin gna teu. Néki'n n'ga weu êh ti bia su tranloua* ».

P1 : « Nos ancêtres, aujourd'hui la chefferie est à tour de rôle. C'est chacun à son tour. Aujourd'hui la chefferie est à votre niveau. Il provient de ce quartier, et c'est à son tour d'occuper le fauteuil de chefferie. »

Paragraphe 2 (L4 -L5) : « *Balai n'ga ye ba'gn kpofoû douwlêfoû bahefoû, ye fah ba ye sié lê êh ti'êh klou su, n'zan n'ga ye maan mou lê, amou non amou sié vié* ».

P2 : « Dans cette intronisation envieux, jeteurs de sort, sorciers ; nous allons installer le nouveau chef, toi qui va t'imposer à cela, la boisson que je vous offre buvez-en et gardez leur part »

Paragraphe 3 (L6-L7) : « *Djouman n'ga êh ni klôfoû me saah di lê êh yan moyé, n'dê n'ga êh kan'gn klo fah su. N'zan yé man mou êh bo weu'gn. Eh katchi ba fiè.* »

P3 : « La mission qui lui a été assignée se réalise, que ses dits soient respectés. Voici le bas de la boisson, que cela se transforme en prospérité. »

Le 1^{er} paragraphe est la partie introductive du discours (Il parle des raisons pour lesquelles la libation est faite). Au sein de ce paragraphe nous avons une fonction phatique

adressée à celui pour qui la libation est faite : « ye baba mou=nos ancêtres ». La fonction phatique n'est pas exprimée par des indices de salutation. Mais cela se voit car, dans le discours de la libation, le fait d'évoquer le nom de quelqu'un est une manière de le saluer.

Le 2^{ème} paragraphe est le corps du discours. C'est à ce niveau qu'on demande aux "dieux" une assistance d'un point de vue protection, pour ne pas permettent aussi que des forces perturbatrices s'en mêlent pour gâcher la cérémonie : « /Balai n'ga ye ba'gn kpofoû douwlêfoû bahefoû, ye fah ba ye sié lê êh ti'êh klou su, n'zan n'ga ye maan mou lê, amou non amou sié vié/ = /Dans cette intronisation, l'envieux, jeteurs de sort, sorcier qui essaiera de perturber la cérémonie ; buvez cette boisson et réservez-en lui ».

Le 3^{ème} paragraphe est la partie conclusive du discours. C'est à ce niveau qu'on fait des vœux et remerciements aux ancêtres : « /Djouman n'ga êh ni klôfoû me saah di lê êh yan yé, n'dê n'ga êh kan'gn klo fah su. N'zan yé man mou êh bo weu'gn. Eh katchi ba fiè. / = /Que la mission qui a été assignée se solde par un succès, que ces dits soit respectés. La boisson qui vous ait offerte, voilà le bas. / » (La clôture obligatoire).

Conclusion

Le discours de la libation renferme des effets linguistiques indénombrables. Ces effets linguistiques sont observables à travers les indices grammaticaux et lexicaux qui composent le discours de la libation. A ce titre, le discours de la libation qui est avant tout un monologue du chef présente dans ses composantes les mêmes caractéristiques que celui du discours narratif. Cette étude nous a permis de vérifier que les éléments qui caractérisent le discours narratif sont aussi identifiable à travers le discours de la libation. Donc, par

ricochet, dire que le discours de la libation présente quelques similitudes du discours narratif. En nous appuyant sur l'approche théorique de la séquence narrative de Jean Michel Adam (1987), nous avons pu dégager les grands axes d'une narration à travers le discours de la libation. Ce constat nous amène à dire que le discours de la libation est similaire à un discours narratif et donc peut faire partir des cinq (5) formes de discours. L'approche théorique de l'identité culturelle de Chaudenson (1992), nous a permis de comprendre l'appartenance des baoulé à leur culture. En effet, la libation est le propre des sociétés africaines traditionnelles. La pratique de la culture pour un individu est donc une identité qui confirme qu'il appartient à une culture donnée. Le sens des énoncés du discours assigne au discours de la libation son fonctionnement dans le paysage rural baoulé.

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Le potentiel de la traduction dans la formation interculturelle des étudiants en langues étrangères à l'université algérienne

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Résumé

Autrefois considérée comme une activité purement technique, sans véritable lien avec les dimensions culturelles, la traduction occupe désormais une place renouvelée dans l'enseignement des langues étrangères, en tant que vecteur d'approche interculturelle. Loin d'être un simple exercice linguistique, elle s'impose comme un outil fondamental dans la formation des étudiants, contribuant à la construction de ponts entre différentes cultures. A travers cette recherche on cherche à explorer la contribution de la traduction au développement des compétences interculturelles chez les étudiants algériens, en insistant sur la nécessité de son intégration structurée au sein des cursus universitaires. L'hypothèse centrale de cette étude repose sur l'idée que la traduction, en tant qu'outil pédagogique, peut jouer un rôle clé dans la sensibilisation des étudiants aux réalités culturelles et dans le développement de leur aptitude à naviguer dans un environnement multiculturel. Pour vérifier cette hypothèse, une enquête par questionnaire a été menée auprès des enseignants du module de traduction. Les résultats révèlent une exploitation encore inégale de la traduction comme levier de formation interculturelle, bien que son potentiel soit largement reconnu. L'avis des enseignants reflète une perception ambivalente, entre reconnaissance des apports de la traduction et mise en évidence des obstacles à sa mise en œuvre dans les cursus. Cette étude plaide ainsi pour une révision des pratiques pédagogiques actuelles, en vue de favoriser une approche plus interculturelle de la traduction dans l'enseignement supérieur algérien.

Mots clés : Traduction, intercculturalité, Enseignement, langue, Pédagogie

The Potential of Translation in Intercultural Training for Foreign Language Students at Algerian Universities

Abstract

Once regarded as a purely technical discipline detached from cultural issues, translation, within the context of foreign language teaching, is now being reassessed from an intercultural perspective. Far from being a mere linguistic exercise, translation has emerged as a fundamental tool in student training, playing a key role in bridging various cultures. This study focuses on the role of translation in enhancing the intercultural competence of students in Algeria, emphasizing the importance of systematically integrating it into university curricula. The central hypothesis of this research is that translation, as a pedagogical tool, can significantly contribute to raising students' awareness of cultural realities and help them develop the skills necessary to navigate a multicultural environment. To test this hypothesis, a survey was conducted among translation module instructors. The results highlight an uneven application of translation in intercultural education, despite its acknowledged potential. The teachers identified both the advantages and challenges associated with incorporating translation into curricula. This study advocates for a revision of current teaching practices in order to promote a more intercultural approach to translation within Algerian higher education.

Keywords: Translation- Interculturality – Teaching- Language - Pedagogy

Introduction

À l'ère de la mondialisation et des échanges constants, la capacité à communiquer entre cultures devient incontournable. L'enseignement des langues étrangères ne peut plus se limiter à l'apprentissage de structures linguistiques ; il doit aussi préparer les apprenants à évoluer dans des environnements pluriculturels, en les sensibilisant aux systèmes de valeurs, aux normes sociales et aux spécificités communicationnelles des autres cultures. Parmi les outils pédagogiques favorisant cette ouverture, la traduction occupe une place de choix. Loin d'être une activité mécanique, elle mobilise des savoirs complexes et suppose une véritable médiation entre les univers culturels. Aujourd'hui encore, cette pratique mérite d'être réexplorée, non comme une simple technique de transcodage, mais comme un vecteur d'intercompréhension et de réflexion sur l'altérité. Dans ce contexte, cette étude interroge le rôle de la traduction dans la formation interculturelle des étudiants en langues étrangères à l'université algérienne. Elle s'appuie sur l'hypothèse selon laquelle l'intégration structurée de la traduction dans les pratiques pédagogiques contribue significativement au développement des compétences interculturelles, en permettant aux étudiants de mieux interpréter les référents culturels et d'adopter une posture d'empathie et de médiation. L'objectif de cette recherche est donc d'analyser la place occupée par la traduction dans les cursus universitaires algériens de langues étrangères, de comprendre comment les enseignants perçoivent son apport dans le développement des compétences interculturelles, et enfin d'évaluer son potentiel en tant que levier pédagogique pour préparer les étu-

dians à interagir de manière consciente et respectueuse dans des contextes multiculturels.

À travers une enquête par questionnaire menée auprès d'enseignants du module de traduction, ce travail vise à cerner les pratiques actuelles, identifier les obstacles rencontrés et proposer des pistes d'amélioration pour renforcer l'approche interculturelle dans l'enseignement universitaire algérien.

1. Cadre théorique

1.1. La compétence interculturelle dans l'enseignement des langues étrangères : un enjeu majeur dans les sociétés contemporaines

Face à l'intensification des échanges humains, culturels et économiques à l'échelle mondiale, la compétence interculturelle s'impose comme une dimension fondamentale de l'enseignement des langues étrangères. Comprendre une langue ne consiste plus seulement à en maîtriser les structures grammaticales ou lexicales ; il convient également d'appréhender les systèmes de valeurs, les normes sociales, les pratiques communicationnelles et les représentations culturelles qui façonnent les interactions. Dans cette perspective, la traduction joue un rôle clé en tant qu'activité cognitive et réflexive qui met en lumière les écarts de sens, les implicites culturels, et les logiques de pensée propres à chaque société. Elle constitue un levier puissant pour développer une posture d'ouverture, de compréhension et de médiation entre les cultures. Comme le souligne S. Mutet, (MUTET S., 2003, p.42) la compétence interculturelle repose sur « une capacité d'empathie, en une qualité du regard non-ethnocentriste ou ethnocentré qui donnent accès à un véritable échange au-delà des malentendus ». Il précise que cette compétence « *n'est pas innée* » ; bien qu'il existe des prédispositions, elle « peut et doit s'apprendre et être entraînée ».

L'université, lieu de formation intellectuelle et éthique, offre donc un cadre idéal pour développer cette compétence, en particulier par l'enseignement de la traduction.

Dans le même sens, Kenneth Cushner rappelle que :

“ Intercultural education can work on many fronts as it strives to eliminate prejudice and racism by creating an awareness of the diversity and relative nature of viewpoints and thus a rejection of absolute ethnocentrism; assist people in acquiring the skills needed to interact more effectively with people different from themselves; and demonstrates that despite the differences that seem to separate people, many similarities do, in fact, exist across groups” (1998, p.2)

Cette citation met en évidence l'importance de l'éducation interculturelle - dont la traduction peut être un vecteur privilégié - pour former des citoyens ouverts, tolérants et capables de dialoguer avec des individus issus d'univers culturels différents. Elle montre que la traduction ne se limite pas à un transfert linguistique, mais devient un véritable outil de déconstruction des préjugés et de construction d'un regard empathique et pluriel sur le monde.

1.2. La traduction comme pratique pédagogique : évolution, fonctions et apports

Longtemps cantonnée à une activité perçue comme purement technique, la traduction a occupé une place prépondérante dans l'histoire de l'enseignement des langues. Pendant des siècles, elle a constitué un élément central de la méthode dite de « grammaire-traduction », qui visait à perfectionner la maîtrise de la langue cible en recourant à une traduction littérale des textes. Bien que critiquée pour son manque de dimension communicative, cette méthode a joué un rôle structurant dans la formation linguistique, notam-

ment en favorisant une compréhension fine des règles grammaticales et du vocabulaire. Avec l'émergence des approches communicatives dans les années 1970-1980, la traduction a été progressivement écartée, considérée comme un frein à l'expression spontanée et à l'immersion linguistique. Cependant, ce rejet s'est peu à peu atténué, et les didacticiens contemporains redécouvrent aujourd'hui les vertus pédagogiques de la traduction, à condition qu'elle soit pratiquée de manière réfléchie et contextualisée. Dans une perspective moderne, la traduction ne se réduit plus à un exercice de transposition linguistique. Elle se transforme en une activité métacognitive qui sollicite la réflexion, la comparaison des systèmes linguistiques, ainsi que la prise en compte des intentions discursives et des référents culturels.

À travers cet exercice, l'étudiant est invité à négocier le sens, à justifier ses choix et à réfléchir sur les divergences entre langues et cultures. La traduction devient alors un lieu d'apprentissage interculturel, un espace où se croisent des visions du monde différentes.

Par ailleurs, la pratique de la traduction peut renforcer plusieurs compétences essentielles :

- La rigueur linguistique (par l'attention portée à la précision et à la nuance),
- La compétence textuelle (grâce à l'analyse des genres, des registres, des intentions),
- La sensibilité interculturelle, car le traducteur va au-delà des mots pour transmettre des valeurs, des représentations et des implicites culturels.

Dans le contexte algérien, où les étudiants en langues étrangères évoluent souvent dans un environnement multilingue et multiculturel, la traduction peut servir de passerelle pédagogique entre leurs connaissances linguistiques et leur réalité culturelle. Elle joue un rôle clé en établissant un

lien entre le monde académique et les défis réels de la communication interculturelle, rendant ainsi l'apprentissage plus concret et mieux ancré dans l'expérience. Les bienfaits de la traduction en tant qu'outil d'apprentissage dans l'enseignement des langues ont amené les spécialistes à en différencier les fonctions en fonction des objectifs pédagogiques visés. Ainsi, Jean Delisle distingue nettement deux formes de traduction : la traduction didactique et la traduction professionnelle." Pour lui, la première est un « exercice de transfert interlinguistique pratiqué en didactique des langues et dont la finalité est l'acquisition d'une langue » (Delisle, 2005 : 49). Autrement dit, il ne s'agit pas de former des traducteurs professionnels, mais d'utiliser la traduction comme **outil de développement linguistique et interculturel**. Cette distinction est particulièrement pertinente dans le contexte universitaire algérien, où la traduction didactique peut jouer un rôle moteur dans l'acquisition approfondie des langues étrangères.

1.3. Traduction et médiation culturelle : entre équivalence et interprétation

La traduction, au-delà de son rôle linguistique, constitue un véritable acte de médiation culturelle. Le traducteur n'est pas un simple passeur de mots, mais un interprète de sens et de contextes, qui œuvre à rendre intelligible un message ancré dans une culture donnée à un destinataire appartenant à un autre univers de références. Dans cette optique, la traduction devient un lieu de rencontre entre les cultures, où la fidélité au texte source ne se mesure pas uniquement en termes d'équivalence lexicale, mais en fonction de l'effet produit, du contexte et des attentes du public cible. Le traducteur est donc un médiateur à part entière, et cette posture

est théorisée par plusieurs auteurs. Selon Ana Maria Simo (Ana M. S.,2020 ,p :12) Roman Jakobson (1963 [1959]) décrit comme un (re)codificateur ou transmetteur de message, soulignant que, malgré la diversité des codes linguistiques, la traduction repose sur la transmission de messages équivalents. Paulo Rónai (1976), quant à lui, revient à l'étymologie du verbe latin *traducere* — « faire passer » — pour illustrer la mission du traducteur : il permet au lecteur d'accéder à un univers linguistique et culturel qui lui est étranger, en l'y conduisant sans le dénaturer. Cette dimension d'accompagnement culturel renforce l'idée que traduire, c'est avant tout permettre une rencontre intelligible entre deux mondes. Les débats autour de la notion d'équivalence traduisent bien cette tension entre fidélité et adaptation. Si certains courants de la traductologie privilégient une correspondance formelle entre les langues, d'autres insistent sur la nécessité de recourir à une interprétation contextualisée, tenant compte des spécificités culturelles, des normes de communication, des implicites ou encore des tabous. Traduire, c'est alors interpréter, reformuler, parfois même négocier le sens, afin de préserver l'intelligibilité du message sans trahir son intention première.

Dans l'enseignement des langues étrangères, concevoir la traduction comme un acte de médiation permet de cultiver chez l'apprenant des compétences clés :

- La conscience des différences culturelles et des risques de malentendus,
- La capacité à analyser un discours dans sa globalité, au-delà des mots,
- Une posture d'empathie et de relativisation, qui est au cœur de la compétence interculturelle.

En exposant les étudiants à des textes qui exigent des choix de traduction subtils, tels que des jeux de mots, des

expressions idiomatiques et des références culturelles. – l’enseignant leur offre un terrain d’expérimentation précieux. Ces situations les obligent à sortir d’une logique de traduction automatique pour entrer dans une démarche réflexive, où chaque mot est un pont, un enjeu, un choix.

Dans le contexte universitaire algérien, où la diversité linguistique est une richesse mais aussi un défi, former les étudiants à cette dimension médiatrice de la traduction leur donne des outils pour évoluer avec aisance dans des environnements pluriculturels. Cela les prépare non seulement à communiquer, mais à comprendre et à construire des ponts entre les cultures, ce qui est fondamental dans un monde où les malentendus interculturels peuvent avoir des répercussions importantes.

2. Numérique, intelligence artificielle et traduction : vers une médiation interculturelle augmentée

L’apparition des outils numériques et la croissance rapide de l’intelligence artificielle ont radicalement modifié les pratiques de traduction. Des applications comme DeepL, Google Translate ou les logiciels de traduction assistée par ordinateur (TAO) permettent désormais un traitement automatisé des textes avec une rapidité et une efficacité accrues. Mais au-delà de cette automatisation, ces technologies ouvrent de nouvelles perspectives pédagogiques, notamment dans le cadre de l’enseignement des langues étrangères à dimension interculturelle. L’usage de ces outils en contexte éducatif permet de confronter les étudiants aux écarts entre une traduction automatique brute et une traduction humaine réfléchie. Cette confrontation les pousse à interroger les choix linguistiques, les implicites culturels, les effets de style, et surtout à analyser la manière dont un message peut

être perçu différemment selon les cultures. Ce travail de comparaison nourrit ainsi leur esprit critique et leur conscience interculturelle. Les environnements numériques favorisent en outre la mise en place de dispositifs d'apprentissage collaboratifs et interactifs. Les étudiants peuvent y traduire, commenter, réviser ou enrichir collectivement des textes, dans une dynamique de co-construction du sens. Cette approche fait émerger une médiation interculturelle augmentée, que l'on peut définir comme une médiation rendue plus efficace, plus riche et plus réflexive grâce aux technologies numériques et à l'intelligence artificielle. Elle ne se limite pas à transmettre un message entre deux langues, mais permet de mieux décoder les contextes culturels, de visualiser les biais de traduction, et de simuler différents scénarios de réception selon les cultures cibles. Dans cette optique, l'usage critique et réfléchi de l'IA devient un levier pédagogique puissant. Il sensibilise les étudiants aux biais algorithmiques, aux pertes de sens dans les traductions automatiques, et les amène à réfléchir sur les enjeux terminologiques et culturels liés à l'usage des technologies. La médiation interculturelle augmentée associe ainsi compétences linguistiques, sensibilité culturelle et savoir-faire numérique, et prépare les étudiants à évoluer dans des environnements professionnels à la fois multilingues et technologiquement avancés. Dans le contexte algérien, où les technologies éducatives s'intègrent progressivement dans les pratiques, il devient essentiel de concevoir la traduction non seulement comme un exercice linguistique, mais aussi comme un terrain de formation critique et interculturelle, amplifiée par les outils numériques.

3. Méthodologie

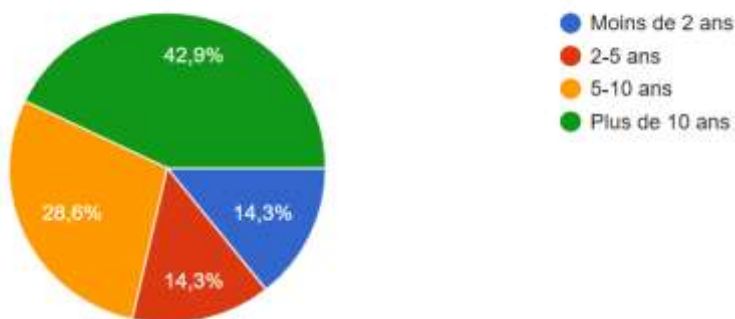
Il convient, dans le cadre de notre étude, de comprendre comment les enseignants intègrent la traduction dans leurs programmes pédagogiques. En particulier, il importe de cerner les méthodologies qu'ils privilégient, la manière dont celles-ci influencent la formation des étudiants, et leur capacité à évoluer dans des contextes interculturels variés. Pour ce faire, une enquête a été menée auprès d'un échantillon composé de 28 enseignants universitaires assurant le module de traduction dans des départements de français et de langues étrangères, répartis sur plusieurs universités algériennes (Biskra, Constantine, Alger, Oran, etc.). Ces enseignants, aux profils variés en termes d'ancienneté et de formation, ont accepté de répondre à un questionnaire visant à collecter des données approfondies sur leurs pratiques pédagogiques, leur perception de la traduction, et l'impact de celle-ci sur le développement des compétences interculturelles chez leurs étudiants. L'outil d'investigation se compose de 11 questions à choix multiples et à réponses ouvertes, permettant aux participants de nuancer leurs propos et de proposer des approches ou ressources qu'ils jugent pertinentes. Les thématiques abordées incluent l'expérience des enseignants, les types de textes traduits, les outils pédagogiques employés, les compétences interculturelles visées, ainsi que les obstacles rencontrés dans l'enseignement de la traduction.

4. Résultats de la recherche

Dans cette partie, nous présenterons les réponses à chaque question en mettant en avant les principales tendances, et analyserons les convergences et divergences pour tirer des conclusions sur l'intégration de la traduction dans

l'enseignement universitaire et son impact sur les compétences interculturelles des étudiants.

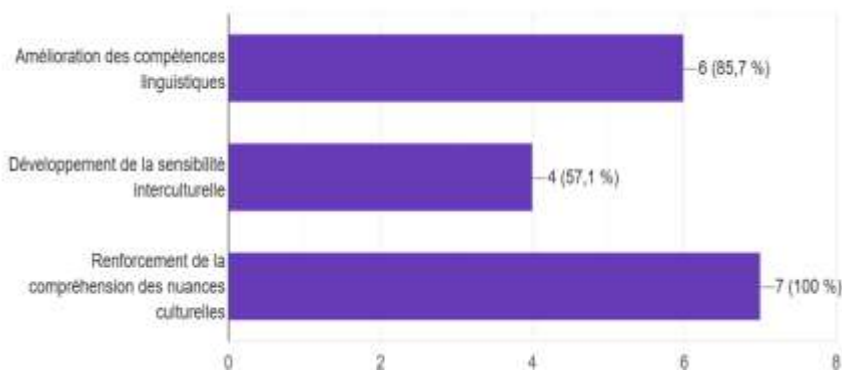
Réponse à la question 1 : Quelle est votre ancienneté dans l'enseignement du module de traduction ?



Graphique N°1 : Ancienneté des enseignants en traduction Commentaire :

Le graphique met en évidence que la majorité des enseignants interrogés possèdent une solide expérience dans l'enseignement de la traduction. En effet, 42,9 % d'entre eux comptent plus de dix ans de pratique, tandis que 28,6 % exercent depuis cinq à dix ans. Ainsi, plus de 70 % disposent d'une ancienneté significative, ce qui constitue un avantage pour le département en termes de savoir-faire et de stabilité pédagogique. Par ailleurs, la part restante, soit 28,6 %, regroupe des enseignants ayant moins de cinq ans d'expérience. Leur présence peut représenter une richesse en matière de renouveau pédagogique et d'approches didactiques, bien qu'elle soulève également des besoins d'accompagnement ou de formation continue.

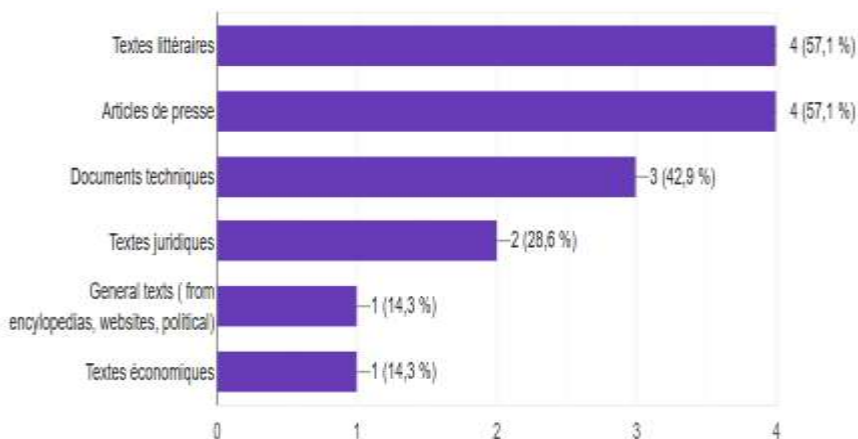
Réponses à la question 02 À votre avis, quels bénéfices majeurs l'intégration de la traduction apporte-t-elle dans l'enseignement des langues étrangères ?



Graphique N°02 : Bénéfices perçus de la traduction

Le graphique met en évidence les principaux avantages que les enseignants accordent à l'utilisation de la traduction dans l'enseignement des langues étrangères. Tout d'abord, l'ensemble des enseignants s'accorde à souligner que la traduction favorise une meilleure compréhension des nuances culturelles, ce qui reflète un large consensus sur sa valeur en tant que passerelle entre les cultures. Ce résultat fait écho à la conception de Michael Byram (1997), pour qui la compétence interculturelle repose sur la capacité à interpréter et relier différentes cultures à travers les discours, la traduction jouant ainsi un rôle de médiation active entre les représentations culturelles. Ensuite, une majorité importante des répondants reconnaît que la traduction améliore les compétences linguistiques des étudiants, notamment en enrichissant leur maîtrise des structures grammaticales, du vocabulaire et de l'usage contextuel des langues. Cette dimension linguistique, tout en étant fondamentale, ne s'oppose pas à

l'approche interculturelle mais la complète. En ce sens, Claire Kramsch (1993) souligne que l'apprentissage d'une langue implique l'entrée dans un "troisième espace", un lieu de dialogue entre langue, culture et identité – espace que la pratique traductive, à travers le va-et-vient entre langues et systèmes de pensée, contribue à façonner chez l'apprenant. Enfin, plus de la moitié des enseignants considèrent que la traduction joue un rôle significatif dans le développement de la sensibilité interculturelle, en aidant les étudiants à mieux percevoir et respecter les différences culturelles. Cette sensibilité accrue, que Byram identifie comme un élément-clé de la compétence interculturelle, est précisément ce que la traduction rend possible lorsqu'elle est abordée comme un acte réflexif et interprétatif, et non comme une simple opération linguistique. **Réponses à la question 03 : Quels supports textuels privilégiez-vous dans votre enseignement de la traduction ?**



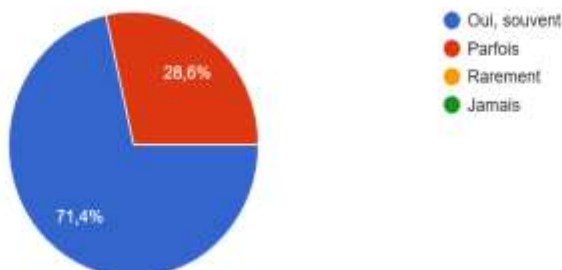
Graphique N° 03 : Supports textuels utilisés

Les réponses recueillies révèlent une diversité marquée dans les types de textes choisis par les enseignants pour les

exercices de traduction, témoignant d'une approche pédagogique flexible et multidimensionnelle :

- 1) **Textes littéraires et articles de presse** : ces deux catégories sont les plus fréquemment utilisées. Les textes littéraires, riches sur les plans stylistique et culturel, permettent aux étudiants d'explorer des expressions idiomatiques et des registres variés. Les articles de presse, quant à eux, plongent les apprenants dans la langue contemporaine tout en les confrontant à des thématiques sociales et politiques actuelles.
- 2) **Documents techniques** : nombre d'enseignants ont également recours aux documents techniques, qui offrent aux étudiants une occasion de se familiariser avec des terminologies spécialisées et des structures syntaxiques complexes. Ce choix reflète une volonté d'initier les apprenants à des traductions de spécialité.
- 3) **Textes juridiques** : certains enseignants intègrent des textes juridiques à leurs pratiques. Ces derniers exigent rigueur, précision et une bonne connaissance des systèmes légaux, ce qui en fait des supports pertinents pour une formation approfondie à la traduction spécialisée.
- 4) **Textes généraux et économiques** : moins souvent mentionnés, les textes généraux sont perçus comme un support de base, utile mais peut-être moins stimulant d'un point de vue linguistique ou culturel. Les textes économiques, bien qu'assez rarement utilisés, jouent un rôle essentiel pour les étudiants souhaitant se spécialiser dans le domaine de la traduction économique et financière.

Réponses à la question 04 : Est-ce que vous intégrez le développement des compétences en communication interculturelle dans les exercices de traduction pour vos étudiants ?

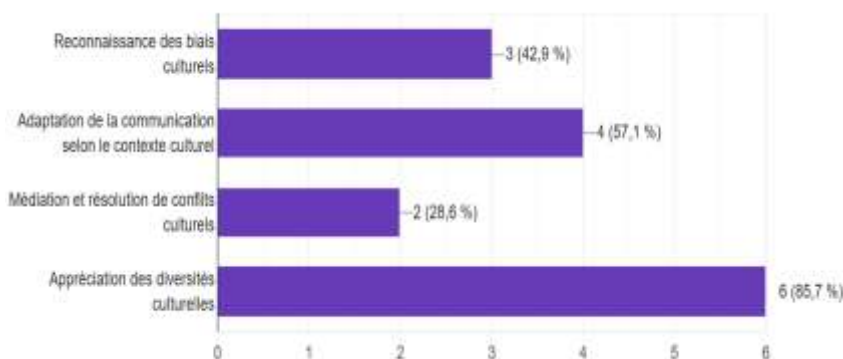


Graphique N° 04 : Intégration de l'interculturel

Les résultats montrent que la majorité des enseignants sont pleinement conscients de l'importance de développer les compétences en communication interculturelle chez leurs étudiants par le biais des exercices de traduction. En effet, un nombre conséquent d'enseignants intègre fréquemment cette dimension dans leur approche pédagogique, mettant en évidence leur engagement à préparer les étudiants à naviguer dans des contextes multiculturels. Ce choix pédagogique reflète l'importance accordée à la sensibilisation des étudiants aux différences culturelles, un aspect clé de la communication interculturelle. En revanche, une proportion d'enseignants déclare aborder cette compétence de manière plus ponctuelle, ce qui peut être dû à des objectifs pédagogiques variés, des contraintes de programme ou une approche plus spécifique centrée sur les compétences linguistiques avant tout. Toutefois, cette tendance reste significative, ce qui montre que presque tous les enseignants reconnaissent l'importance de cette compétence, même si son traitement peut varier d'un enseignant à l'autre. Enfin, il est in-

intéressant de noter qu'aucun enseignant n'a indiqué que la communication interculturelle soit rarement ou jamais développée dans leurs exercices de traduction.

Réponses à la question 05 : Listez les compétences interculturelles précises que vous cherchez à développer chez vos étudiants à travers les exercices de traduction.



Graphique N° 05 : Compétences interculturelles visées

Les résultats de cette question mettent en évidence les compétences interculturelles spécifiques que les enseignants souhaitent développer chez leurs étudiants à travers les exercices de traduction. Voici une analyse détaillée des réponses :

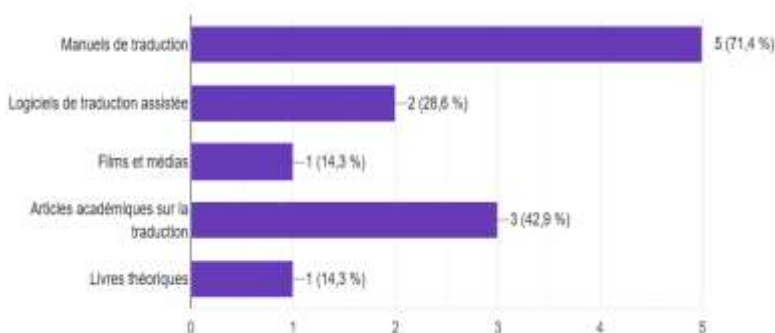
- 1) **Appréciation des diversités culturelles :** La majorité des enseignants souligne l'importance d'apprendre à apprécier les diversités culturelles. Cela témoigne d'une volonté forte de sensibiliser les étudiants à la richesse et à la variété des cultures, une compétence essentielle pour instaurer une communication interculturelle réussie. Elle est fondamentale pour encou-

rager le respect et la compréhension mutuelle entre des individus issus de cultures différentes.

- 2) **Adaptation de la communication selon le contexte culturel** : Plus de la moitié des enseignants cherchent à aider leurs étudiants à adapter leur communication en fonction des contextes culturels. Cette compétence est cruciale pour éviter les malentendus et les conflits potentiels lors des échanges interculturels. Elle permet aux étudiants d'être plus flexibles et réactifs dans des environnements multiculturels.
- 3) **Reconnaissance des biais culturels** : Une proportion significative d'enseignants insiste sur l'importance de la reconnaissance des biais culturels. En développant cette compétence, les étudiants deviennent plus conscients de leurs propres préjugés et stéréotypes, ce qui est essentiel pour une communication interculturelle honnête et ouverte. Cela leur permet également d'adopter un esprit critique face aux différences culturelles.
- 4) **Médiation et résolution de conflits culturels** : Bien que moins répandue, la compétence en médiation et résolution de conflits culturels est également soulignée par certains enseignants. Ces derniers reconnaissent la nécessité de préparer les étudiants à jouer un rôle actif dans la gestion des différends culturels, un aspect clé dans un environnement globalisé.

Cette diversité des compétences mises en avant témoigne d'une approche complète de l'enseignement de la traduction, qui vise à préparer les étudiants à évoluer efficacement dans un monde de plus en plus interconnecté et multiculturel.

Réponses à la question 06: Quels moyens ou supports mettez-vous en œuvre pour enseigner la traduction en relation avec la communication interculturelle ?



Graphique N°06 : Outils pédagogiques mobilisés

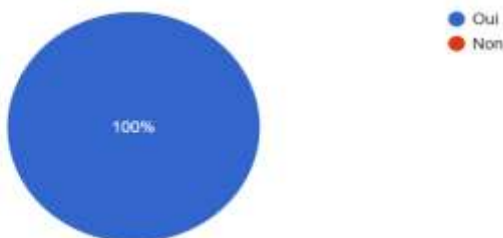
Les réponses à cette question mettent en évidence les outils privilégiés par certains enseignants pour intégrer la communication interculturelle dans l'enseignement de la traduction, tandis que d'autres accordent la priorité aux ressources. Voici une analyse détaillée des résultats :

- 1) **Les manuels de traduction** demeurent un support pédagogique essentiel pour de nombreux professeurs. Offrant une structure équilibrée ainsi que des exercices ciblés, ces ouvrages favorisent le développement des aptitudes en traduction et communication interculturelle. Leur utilisation souligne leur rôle de référence fiable et exhaustive couvrant divers aspects du métier. Cependant, pour quelques enseignants, des ressources en ligne gratuites et interactives s'avèrent tout aussi pertinentes afin de stimuler l'intérêt des étudiants grâce à leur caractère ludique et actuel. Leur utilisation souligne leur rôle en tant que ressources fiables et complètes couvrant différents aspects de la traduction.
- 2) **Articles académiques sur la traduction** : Un bon nombre d'enseignants se tournent vers des articles

académiques pour enrichir leurs cours. Ces articles permettent d'introduire des théories et des recherches récentes, apportant ainsi une perspective plus approfondie et critique sur la traduction et la communication interculturelle.

- 3) **Logiciels de traduction assistée** : Certains professeurs ont recours à des logiciels de traduction assistée, incorporant ainsi les technologies modernes dans leur enseignement. L'utilisation de ces outils aide les étudiants à se familiariser avec les technologies professionnelles couramment employées dans l'industrie de la traduction.
- 4) **Films et médias** : Un nombre plus restreint d'enseignants recourt à des films et autres supports médiatiques comme ressources pédagogiques. Cette approche visuelle et interactive enrichit l'expérience d'apprentissage et permet de rendre les concepts plus accessibles et attrayants pour les étudiants.

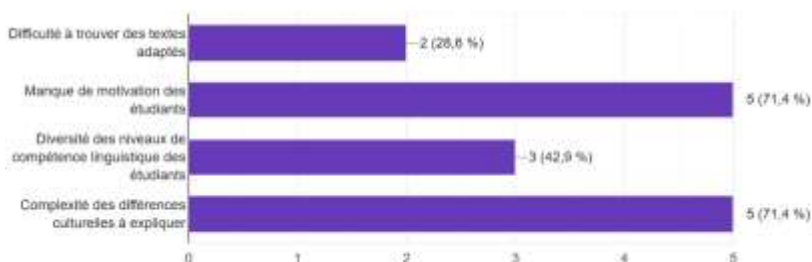
Réponse à la question 07 : Pensez-vous que le développement des compétences en traduction chez les étudiants contribue à une meilleure compréhension des cultures étrangères ?"



Graphique N° 07 : Traduction et compréhension culturelle

Les réponses à cette question révèlent une unanimité parmi les enseignants interrogés. Tous estiment que les compétences en traduction développées chez les étudiants favorisent une meilleure compréhension des cultures étrangères. Cette conviction partagée souligne que la traduction n'est pas simplement un transfert linguistique, mais qu'elle joue un rôle fondamental dans la médiation culturelle. Les enseignants reconnaissent ainsi que la traduction constitue un outil essentiel pour promouvoir la compréhension inter-culturelle et faciliter les échanges culturels.

Réponses à la question 08 : Quels facteurs freinent l'utilisation de la traduction dans l'enseignement des langues étrangères ?



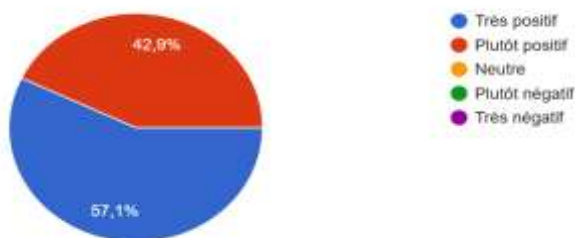
Graphique N°08 : Freins à l'intégration de la traduction

Les réponses des enseignants mettent en lumière plusieurs obstacles majeurs rencontrés dans l'enseignement de la traduction :

- 1) Le manque de motivation des étudiants est identifié comme un défi majeur par la plupart des enseignants. Ce frein pourrait refléter des difficultés à susciter l'intérêt des étudiants pour la traduction ou à maintenir leur engagement tout au long du processus d'apprentissage.

- 2) La complexité des différences culturelles à expliquer constitue un autre défi majeur. Les enseignants soulignent que les nuances culturelles et les subtilités sont parfois difficiles à transmettre et à comprendre, ce qui complique l'enseignement de la traduction interculturelle.
- 3) La diversité des niveaux de compétence linguistique des étudiants est également mentionnée comme un frein important. Cette hétérogénéité des compétences linguistiques oblige les enseignants à adopter des stratégies pédagogiques variées pour répondre aux besoins de chaque étudiant.
- 4) Enfin, la difficulté à trouver des textes adaptés pour les exercices de traduction est un obstacle relevé par certains enseignants. Trouver des textes qui soient à la fois pédagogiquement pertinents et culturellement riches peut se révéler un véritable défi, surtout dans un environnement éducatif diversifié.

Réponse à la question 09 : Comment percevez-vous l'effet de la traduction sur le développement de la sensibilité culturelle des étudiants ?



Graphique N° 09 : Impact sur la sensibilité culturelle

Les réponses des enseignants révèlent une évaluation largement positive de l'impact de la traduction sur la sensibilité culturelle des étudiants :

- 1) **Très positif** : Plus de la moitié des enseignants considèrent que l'impact de la traduction sur la sensibilité culturelle des étudiants est très positif. Cela indique que la majorité des enseignants reconnaissent l'importance de la traduction pour favoriser la compréhension et l'appréciation des différences culturelles.
- 2) **Plutôt positif** : Une proportion significative des enseignants juge cet impact plutôt positif. Bien que cet avis ne soit pas aussi enthousiaste, ils admettent tout de même les bienfaits de la traduction pour sensibiliser les étudiants à la culture d'autrui.

Aucun enseignant n'a exprimé une évaluation neutre, plutôt négative ou très négative de l'impact de la traduction sur la sensibilité culturelle des étudiants. Ces résultats soulignent l'importance d'intégrer la traduction dans l'enseignement des langues étrangères pour renforcer la compréhension interculturelle.

Réponse à la question 10 : En quoi la traduction contribue-t-elle, selon vous, à renforcer la communication interculturelle chez les étudiants ?

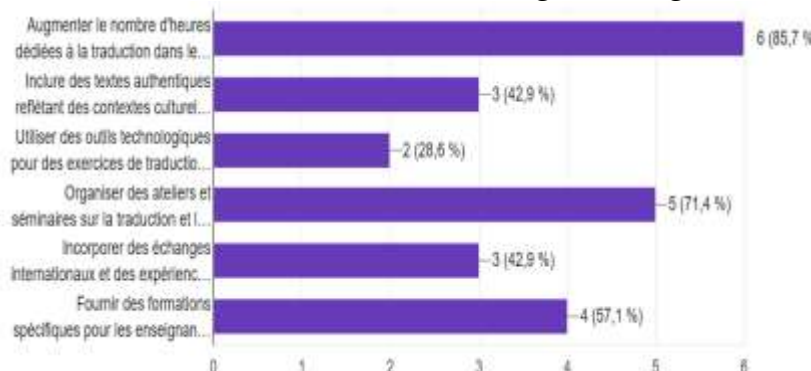


Graphique N°10 : Apports à la communication interculturelle

Les enseignants interrogés reconnaissent que la traduction joue un rôle important dans l'amélioration de la communication interculturelle des étudiants. D'une part, elle contribue au développement d'une meilleure compréhension des nuances culturelles. Grâce aux exercices de traduction, les étudiants sont amenés à repérer et interpréter les subtilités propres à chaque culture, telles que les expressions idiomatiques, les références historiques, les valeurs implicites ou les normes sociales. Cette capacité à saisir l'implicite culturel leur permet d'adopter une posture plus ouverte et empathique dans leurs interactions. D'autre part, les enseignants soulignent que la traduction aide les étudiants à reconnaître et à éviter les malentendus culturels. En comparant des textes issus de cultures différentes, les apprenants prennent conscience des risques d'interprétations erronées liés aux écarts linguistiques et culturels. Cela favorise chez eux une vigilance communicationnelle et une sensibilité accrue aux contextes d'énonciation. Certains enseignants mettent également en avant la manière dont la traduction permet de renforcer les compétences en médiation culturelle. En apprenant à passer d'un système de pensée à un autre, les étudiants développent des stratégies pour reformuler, adapter ou expliquer un contenu en tenant compte des références culturelles du public cible. Ce rôle d'intermédiaire culturel, souvent implicite dans la traduction, devient alors un exercice de négociation et d'interprétation qui enrichit leur compétence interculturelle. Enfin, plusieurs enseignants considèrent que la traduction encourage une réflexion critique sur les différences culturelles. Elle invite les étudiants à dépasser une simple juxtaposition des langues pour interroger les écarts culturels, les représentations du monde, et même les rapports de pouvoir entre langues et cultures. Cette posture critique les pousse à reconsidérer leurs propres référents cul-

turels, et à aborder l'altérité avec plus de recul et de discernement. Dans l'ensemble, les enseignants interrogés s'accordent à dire que la traduction, bien au-delà d'un simple exercice linguistique, constitue un levier pédagogique essentiel pour former des étudiants capables de naviguer avec aisance et intelligence dans des contextes multiculturels.

Réponse à la question 11 : Parmi les pistes proposées, lesquelles vous semblent les plus pertinentes pour renforcer le rôle de la traduction dans le développement des compétences interculturelles en classe de langue étrangère ?



Graphique N° 11 : Pistes d'amélioration proposées

es réponses des enseignants révèlent des pistes claires pour les recommandations à adopter afin de renforcer le rôle de la traduction dans l'enseignement des langues étrangères et dans le développement de la communication interculturelle. La priorité absolue, pour une grande majorité, est d'augmenter le nombre d'heures dédiées à la traduction dans le curriculum, témoignant de la conviction que ce renforcement horaire pourrait significativement améliorer les compétences interculturelles des étudiants. Par ailleurs, plusieurs enseignants recommandent d'organiser des ateliers et

séminaires sur la traduction et la communication interculturelle, soulignant l'utilité de ces espaces formatifs pour approfondir la réflexion et les échanges autour des enjeux culturels liés à la traduction. Un nombre conséquent d'enseignants mettent également l'accent sur la nécessité de fournir des formations spécifiques pour les enseignants sur les méthodes de traduction et la communication interculturelle, reconnaissant ainsi l'importance du développement professionnel pour une transmission plus efficace des savoirs interculturels. D'autres estiment que l'intégration de programmes d'échanges internationaux et d'expériences immersives pourrait enrichir la sensibilité culturelle des étudiants, tout comme le recours à des textes authentiques reflétant des contextes culturels variés, jugé pertinent mais légèrement moins prioritaire. Enfin, l'idée d'utiliser des outils technologiques pour des exercices de traduction interculturelle apparaît moins fréquemment, ce qui peut s'expliquer par certaines réserves ou une préférence pour des approches plus traditionnelles perçues comme plus efficaces dans le contexte d'apprentissage actuel.

4. Discussion

Les résultats de notre étude ont montré que la majorité des enseignants interrogés reconnaissent que la traduction aide les étudiants à mieux saisir les nuances culturelles et à développer une sensibilité accrue aux différences entre systèmes de valeurs, référents culturels et pratiques sociales. Cette perception rejoint les travaux de Michael Byram (1997), qui considère la compétence interculturelle comme une composante essentielle de l'enseignement des langues, fondée sur la capacité à interpréter et à relier différentes cultures. Dans cette perspective, la traduction devient un exercice de médiation, où l'étudiant, loin de se limiter à une

simple transposition de mots, devient un passeur de sens et de cultures. Les apports de Claire Kramsch (1993) illustrent l'importance d'un "troisième espace", dans lequel l'apprenant navigue entre deux systèmes culturels, développant ainsi une réflexion sur ses propres représentations et celles de l'autre. La traduction, lorsqu'elle est pratiquée de manière critique, permet d'accéder à cet espace intermédiaire. En outre, la référence à Christiane Nord (2005) permet d'éclairer le rôle de la finalité communicative dans la traduction interculturelle. En adaptant le message au contexte culturel du destinataire, l'étudiant apprend à tenir compte des attentes, des conventions et des sensibilités culturelles spécifiques. Cet apprentissage méthodologique renforce non seulement ses compétences linguistiques, mais aussi sa capacité à anticiper les malentendus et à ajuster sa communication. Cependant, malgré ces résultats positifs, certaines limites doivent être soulignées. D'une part, la valorisation de la traduction comme levier interculturel repose sur une pédagogie exigeante, qui suppose du temps, des compétences spécifiques de la part des enseignants et un accompagnement méthodologique rigoureux. Or, dans de nombreux contextes universitaires, les contraintes de programme, la surcharge horaire ou l'absence de formation didactique spécialisée limitent parfois la mise en œuvre de telles pratiques. D'autre part, si la majorité des enseignants perçoivent l'intérêt interculturel de la traduction, cette reconnaissance ne garantit pas toujours une application concrète, structurée et régulière dans leurs cours. Les enseignants interrogés soulignent d'ailleurs plusieurs préoccupations concrètes, telles que le manque de motivation des étudiants, la diversité des niveaux de compétence et la difficulté d'expliquer certaines subtilités culturelles. Ces défis mettent

en lumière la nécessité d'adopter une approche didactique plus cohérente, qui inclut des objectifs interculturels clairement définis dans les cours de traduction. Des activités ciblées, utilisant des textes authentiques et des situations de médiation réelles, pourraient ainsi encourager une réflexion critique et accroître la prise de conscience des enjeux culturels. Enfin, les recommandations formulées par les enseignants — augmentation du volume horaire, organisation d'ateliers, formation continue — montrent une volonté forte de renforcer la place de la traduction comme dispositif pédagogique central dans la formation interculturelle. Cela invite les institutions à reconsidérer le potentiel de la traduction, non pas comme simple outil linguistique, mais comme levier pédagogique essentiel dans un monde où la communication interculturelle est devenue une compétence clé.

Conclusion

En conclusion, la traduction se présente comme un pilier incontournable de la communication interculturelle dans l'enseignement des langues étrangères. Les résultats de notre enquête montrent que les enseignants, grâce à leur expérience et à leurs méthodes pédagogiques, utilisent la traduction comme un outil efficace pour favoriser la médiation et l'appréciation interculturelles. Malgré certains défis, la traduction reste un moyen essentiel pour transcender les barrières linguistiques et créer des ponts entre les cultures, renforçant ainsi la capacité des étudiants à naviguer dans un monde globalisé et diversifié.

Comme le souligne Jean-René Ladmiral (1998) :
« La traduction n'est pas seulement le bricolage
d'une écriture seconde, mais qu'elle se révèle être

pour ainsi dire un dispositif philosophique qui permet inopinément le retour réflexif d'une prise de conscience critique de la modernité et des identités vacillantes qui sont maintenant les nôtres. »

Cette perspective met en évidence le rôle profond et multidimensionnel de la traduction, enrichissant notre compréhension et notre interaction avec le monde moderne.

Afin de renforcer son intégration effective dans la formation universitaire, il serait pertinent que les institutions mettent en place des modules de formation continue à destination des enseignants, axés sur la traduction didactique et la médiation interculturelle. Il serait également judicieux de revaloriser le volume horaire dédié à la traduction dans les programmes de langues étrangères et de promouvoir des ateliers collaboratifs autour de textes authentiques, intégrant les outils numériques et l'intelligence artificielle. Enfin, l'élaboration de ressources pédagogiques partagées, co-construites entre enseignants de différentes institutions, pourrait favoriser une approche plus cohérente et innovante de la traduction au service de l'interculturel.

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Basics of Arabic Mathematical Language by Al-Khwarizmi

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Abstract

Mathematics is one of the oldest sciences explored by nearly all human civilisations because of its direct connection with human life activities. Consequently, the remarkable intellectual advancement achieved in this field resulted from the cross-pollination of diverse human experiences, with the Arab contribution being particularly notable. Arab scholars have made significant efforts to develop many sciences, among which mathematics is especially prominent. The renowned scholar 'Al-Khwarizmi' became a leading figure in this domain, clearly impacting Arabic and global mathematics. His genius led him to establish new mathematical notation systems that continue to be utilised and engaged within modern mathematical research.

Keywords: Algebra; Al-Khwarizmi; Mathematics; Mathematical notation; Mathematical terminology.

Les bases du langage mathématique arabe par Al-Khwarizmi

Résumé

Les mathématiques sont l'une des plus anciennes sciences explorées par presque toutes les civilisations humaines en raison de leur lien direct avec les activités de la vie humaine. Par conséquent, les progrès intellectuels remarquables réalisés dans ce domaine résultent de la pollinisation croisée de diverses expériences humaines, la contribution arabe étant particulièrement remarquable. Les savants arabes ont déployé des efforts considérables pour développer de nombreuses sciences, parmi lesquelles les mathématiques occupent une place de

choix. Le célèbre savant « Al-Khwarizmi » est devenu une figure de proue dans ce domaine, influençant clairement les mathématiques arabes et mondiales. Son génie l'a conduit à établir de nouveaux systèmes de notation mathématique qui continuent d'être utilisés et engagés dans la recherche mathématique moderne.

Mots-clés : *Algèbre ; Al-Khwarizmi ; Mathématiques ; Notation mathématique ; Terminologie mathématique.*

Introduction

Mathematics stands out as one of the foremost sciences that humans have eagerly embraced, explored, delved into, and excelled across various branches, including arithmetic, algebra, geometry, and more. Humanity's engagement and fascination with mathematics stem from two pivotal reasons: their desire to uncover the mysteries of the universe and broaden the boundaries of fundamental knowledge. The second reason is the intrinsic connection of these precise knowledge systems with various practical human affairs, enabling individuals to benefit from and utilise mathematics to advance their material interests. Together, these factors have directly contributed to the effective growth of mathematical sciences, leading to their branching into numerous fields and specialisations. In this context, Arabs, like other nations, play a substantial role in developing Arabic mathematics. They benefited from the cultural exchange that helped shape its contours and, in turn, contributed to its advancement by establishing new concepts and correcting erroneous ones through numerous mathematicians, the most notable of whom was 'Al-Khwarizmi.' He left a significant mark on the pages of human mathematical thought with his innovations, which continue to demonstrate their greatness and unique role in constructing the foundation of mathematical science.

1. Definition of Mathematics

Specialised studies have yet to provide a stable, universally agreed-upon definition of the fields encompassed by 'mathematics,' which justifies the variations in its concept from one researcher to another, depending on the field in

which it is applied. This, naturally, is due to the multiplicity of its branches and domains.

Accordingly, mathematics is the abstract, logical study of systems and mathematical propositions. It addresses various issues, including measurement, geometry, arithmetic, dimensions, space, etc. In short, mathematics studies everything related to quantity, quality, and interconnection. Therefore, it requires specific intellectual skills, particularly analysis and reasoning, which must be precise, clear, and rational in posing and discussing issues. It is based on logic and proof and uses distinct and unique mathematical notation systems.

Some scholars define it on the basis of the methodology it uses to achieve its intended outcomes, describing it as an "abstract science that uses deduction to discover numerical and geometric relationships, among others. This science is characterised by its organisation, accuracy, and sequential presentation of information, which contributes to arriving at precise explanations of ideas and results." (Rashed, M. 2009) Abstract methodology is the primary mechanism mathematicians employ in their studies and research. It distinguishes mathematics as a universal language on the basis of a set of shared symbols and rules, regardless of its origin and history of development. Conversely, others consider it a "high art due to its characteristic structure, sequence of ideas, harmony in construction, elegance in design, and precision in presenting mathematical models, whether scientific or illustrative of life situations." (*Ibid.*, p.15) The word 'Mathematics' has Greek origins. The concepts studied in this field have been expressed with various names throughout history and across different cultural milestones. In Latin and English, approximately 1700 BCE, the most common term for mathematical research was 'Astrology' or 'Astronomy,' but this

term eventually faded and evolved into the contemporary concept of mathematics. In discussing the historical origins of this word, Jacqueline Stedall stated:

The Greek word 'mathemata' refers to what has been learned, sometimes in a general way, and at other times, it was more specifically associated with astronomy, arithmetic, or music. The modern term 'mathematic' and its equivalents in different European languages were derived from this Greek word. However, the meanings of words have undergone various changes over the centuries." (Stedall, J. 2016).

Thus, mathematics emerged through a series of human experiences that began at the dawn of history, ever after humanity's existence on Earth. It has undergone various stages, each contributing to its development and shaping it into its current form through the participation of diverse civilisations from East China and West China over extended historical periods.

2. Importance and origins of mathematics in human thought

Mathematics is one of the oldest sciences studied by scholars in various civilisations and has played a prominent role in human life since ancient times. This explains why it is one of the earliest sciences known to humankind, dating back to ancient times. Studies on the history and origins of this science have shown that the primary reasons for its emergence lie in human nature, the love for knowledge, and the passion for measuring natural phenomena. This curiosity, combined with familiarity with certain mathematical principles and concepts that emerged in the early stages of the field, enabled people to study the various natural phenomena around them and analyse their interrelationships.

This opened vast horizons for understanding the laws and standards governing the universe.

Therefore, mathematics is directly connected to practical, sensory reality and human daily practice, particularly in "Egyptian and Babylonian civilisations, which faced the economic and social pressures of calculating for trade activities and predicting astronomical events" (Al-Jabiri, M. A. 1998). Human activities and needs directly drove the emergence of new branches of mathematics in ancient civilisations. For example, "the floods of the Nile River pushed ancient Egyptians to invent geometric methods to measure field areas and organise agriculture and irrigation" (**Ibid.**, p.57). Furthermore, human interactions across different fields urgently require mathematical concepts and principles to manage and organise their affairs. An individual must interact with others, which requires understanding society and recognising its capabilities and circumstances. This is achieved through the significance of the numbers surrounding them. These numbers, and the associated social dealings such as buying, selling, giving, receiving, production, and consumption, are essentially built upon fundamental mathematical knowledge and skills. " (Rashed, M. 2009).

This implies that human cultural development leads to the advancement of mathematics and other sciences. The historical record proves that the emergence of mathematics did not occur all at once and was not solely the work of one individual or nation. "The Babylonians, Egyptians, Greeks, Indians, Arabs, and others... all made significant contributions to various fields of science, helping it grow and develop to its present state. " (Toukan, Q. H. n.d), starting from the Sumerian civilisation and extending to the Arab-Islamic civilisation.

3. Stages in the Emergence of Mathematics in Arab-Islamic Civilisation

Mathematical sciences were prominent in Arab civilisation, where great efforts were made to develop mathematical concepts. This is evidenced by various pioneering theories introduced by early Arab scholars, reflecting their active engagement in this field. However, it is noteworthy that the term 'Mathematics' in its contemporary sense was not common in ancient Arab studies; the field was studied in various branches related to numbers, arithmetic, geometry, and others. These mathematical topics appeared in the Arab world under multiple names, commonly algebra, arithmetic, and trigonometry. Each mathematical concept differs in its study nature and applications, yet they share a unified focus. "The number of Arab mathematicians has been estimated at over five hundred, according to (Suter) in his book *The Arabs' Mathematicians, Astronomers, and Their Works*." (Mubarak, H., and S. Abu Khalil. 1991).

The Arabs were initially motivated by religious concerns to engage with certain mathematical aspects, which they employed to facilitate religious practices and ensure proper direction in worship. For example, they applied mathematical principles to regulate prayer times, determine the start of lunar months, and locate the qibla (direction of the prayer). They also used mathematical concepts to divide weights and spoils. Owing to their considerable focus on mathematics for organising and guiding religious life, these sciences experienced remarkable advancements. The development of Arabic sciences, particularly mathematics, can be divided into three primary stages:

First: The Stage of Transmission and Translation

The Arabs' initial endeavour in this fertile field of science was to turn to the intellectual contributions of previous civilisations that had engaged with mathematics. Their approach relied heavily on translation, as "Muslims translated Euclid's Elements—the cornerstone of the humanities—into Arabic, studied it thoroughly, expanded on its theories, devised intricate solutions, authored books following its structure, and introduced new issues unknown to ancient scholars." (Muhammad, M. A. A. M. 2018) They also applied mathematical concepts and skills to essential areas with close connections, such as architecture, astronomy, and geometry.

This translation stage spanned two centuries, from the 7th to the 9th century CE. They did not limit themselves to one nation or a specific line of thought in their persistent efforts. Instead, they draw upon a diverse range of scientific sources and methodologies. These included the general heritage of ancient Babylonian, Egyptian, Chinese, Indian, and Phoenician civilisations, which was transmitted through Islamic conquests and commercial exchanges. Additionally, the intellectual heritage of India and Persia contributed to numbering systems, whereas Greek heritage influenced the advancement of the geometric sciences. " (Zaghwan, B. H. 2014).

Consequently, the Arabs inherited an extensive intellectual legacy but did not merely adopt it. They made distinctive contributions in furthering and correcting some of its misguided directions.

Second: The Stage of Purely Arabic Composition

This stage differed from the previous one, as Muslims began developing distinct Arabic scientific thought across var-

ious fields of knowledge. They built upon the understanding of their predecessors, making valuable and enriching contributions to the field.

Third: The Stage of Scientific and Intellectual Export

In this stage, Arab sciences and knowledge spread from their birthplace in the Arab-Islamic world to Europe, experiencing the dark Middle Ages period. Europeans relied on Latin translations of various fundamental sciences in the Arab intellectual world. "Without the work of Arab scholars, European Renaissance scientists would have had to start from where the Arabs did, which would have delayed civilisation's progress by centuries." (Muntaser, A. H. 1970). Numerous Western scholars who have researched the history of sciences and the role of different human civilisations in their development have acknowledged this. Although some have denied the Arab role in Europe's scientific renaissance, the prevailing belief is that the Arabs introduced no new mathematical concepts and were merely involved in translation and transmission.

3.1. A Brief Overview of Al-Khwarizmi's Career and His Role in Advancing Arabic Sciences

Muhammad ibn Musa Al-Khwarizmi was born in Khwarazm at 780 CE but lived and settled in Iraq. Historical sources differ in their origins and identities. *The Mathematics Encyclopedia* and *Microsoft Encyclopedia* indicate that he was of Arab origin, whereas "other sources state that he was Persian or Turkish." (Rashed, R. 1989).

Al-Khwarizmi was a polymath, excelling in multiple areas of knowledge, greatly aided by his position at the *House of Wisdom* in Baghdad, where he worked as a translator of for-

eign sciences and knowledge. The *House of Wisdom* was founded under Caliph Al-Ma'amoun's patronage, providing Al-Khwarizmi with an essential intellectual environment. Although he drew from many fields, he excelled in mathematics, particularly algebra and geometry. His reputation spread throughout the Arab and Western worlds through the mathematical books he authored, which were translated into multiple languages, immortalising his name in the annals of human thought. Historians noted that his works have 27 titles across various scientific disciplines.

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Arithmetic is a mathematical field involving numbers and arithmetic methods, including the four basic operations.

Some researchers refer to it as the 'science of numbers' or 'number theory,' a science addressing many social concerns, which explains its prevalence across most human civilisations. Arabs, too, had a keen interest in this field, as they "relied on the counting system for commercial transactions, inheritance distribution, land measurement, and in weight and volume calculations, as well as in the distribution of spoils..." (Toukan, Q. H. n.d). Among the Arab contributions to 'number science' was Al-Khwarizmi's pioneering introduction of the (zero) symbol into the numerical system. Previous civilisations used numerical systems without employing this symbol or digit in calculations. One historian commented, "The Indians used the zero symbol to signify 'nothing.' Nevertheless, the new contribution by Al-Khwarizmi was that he gave zero value, solving the issue by assigning it as a multiple of ten, thus establishing place values of tens, hundreds, and thousands... The term zero, used by Europeans, derives from al-khwarizmi's terminology: Zero, Zero, Ziphirum, Ziffer, and capsicum, far. " (Osman, A. R. n.d.).

All these arithmetic concepts are now included under what modern mathematics calls the 'decimal numbering system.'

One distinctive aspect of the scientific contributions made by Arab scholars was the systematic approach to presenting scientific material, whether old or new, opening vast opportunities for Western scholars to benefit from this refined, organised scientific repository. Al-Khwarizmi exemplified this methodology by writing a book on arithmetic that was the first of its kind regarding organisation, classification, and content. It was the first book to reach Europe, where it remained for a long time as a reference for scientists, merchants, and accountants, a source for their arithmetic stud-

ies. Readers may be surprised that arithmetic was known for several centuries by the name 'Algorismi,' after Al-Khwarizmi. (Toukan, Q. H. n.d.).

Thus, Western scholars became acquainted with the scientific contributions made by Al-Khwarizmi and other Arab scholars and benefitted from these intellectual treasures for centuries. Arithmetic reached Europe through *Al-Andalus*, where "this translation brought with it, in addition to the theory, the numbers known in the West as (dust numerals)." (Hamoud, K. 1990), whose trajectory we explore further in subsequent discussions.

3.2. Trigonometry

Trigonometry is a branch of mathematical geometry that studies angles and triangles. It examines the relationships between triangle sides and angles and their connections to other geometric shapes. Trigonometry is known among Arabs as 'the science of proportions' because it studies the relationships arising from ratios between triangle angles and sides.

The study of trigonometry has been conducted among previous civilisations, such as the Greeks, "who used these discoveries in their astronomical research, which is why trigonometry remained intertwined with astronomy for them. Indians also knew trigonometry, although their knowledge was more advanced than that of the Greeks" (*Ibid.*, p.91). Arabs later absorbed these insights after encountering the cultural heritage of earlier civilisations. In this context, Kamal Hamoud noted a significant Arab innovation in trigonometry: "The Arabs, after examining Greek and Indian knowledge, developed it further and added their innovations. Their first accomplishment was separating trigonometry from astronomy, then organising it and establish-

ing its principles." (Ibid., p.91). Through these contributions, Arab scholars brought this science into existence after refining, correcting, and adding essential elements, leading many to consider it an Arab science (Toukan, n.d.). Al-Khwarizmi played an active role in systematically structuring its concepts, showcasing his exceptional genius.

3.3. Algebra

Ibn Khaldun described algebra as follows: "Algebra and Balancing is a branch of number science, a method by which unknown numbers are determined from known numbers when a relation is assumed between them." (Faroukh, O. 2002). Al-Khwarizmi focused his algebraic concepts on practical applications to facilitate life affairs such as sales, leases, currency exchange, and measurement.

In discussing Al-Khwarizmi's role in establishing mathematical principles in algebra, Qadri Toukan commented, "The Arabs invented an important, distinctive science that did not exist before them: algebra, invented by Muhammad ibn Musa Al-Khwarizmi. In Europe, this science is known as logarithm (logarithm), a term derived from al-khwarizmi's name—the founder of this science" (Toukan, Q. H. n.d.). Numerous scholars have affirmed Al-Khwarizmi's precedence in establishing the foundations of this modern science. "Al-Khwarizmi introduced a science with complete autonomy, being the first to use the term *Al-jabr*, signifying a specific science with its rules, principles, and equations, and provided it with new technical terms to represent objects and operations. " (Hamoud, K. 1990).

In the same vein, he countered viewpoints that downplay Al-Khwarizmi's originality, casting him merely as an organiser of Greek and Latin ideas. He responded, "Concerning

the Western view of Al-Khwarizmi's originality, opinions are divided. However, objective research, which is free from religious or nationalistic bias, has confirmed that Al-Khwarizmi's algebra stands apart from the level found among the Indians and Greeks. Al-Khwarizmi was indeed the founder and pioneer of algebra (Ibid., p.129).

One of Al-Khwarizmi's most famous works, *Al-Jabr wal-Muqabala*, became highly influential in the Arab world. Scholars consider it a comprehensive algebraic manual, making it an essential reference for anyone seeking to understand algebra, whether Arab or Western. "This book was translated into Latin in the 12th century by several translators, including Gerard Cremoni, and later into Italian, German, and English, eventually becoming a core mathematics reference in most Western universities in the 15th and 16th centuries" (Ibid., p.138). In the Arab world, numerous scholars have studied and commented on its content, benefiting from its intellectual wealth, a legacy that remains celebrated in human civilisation today.

4. Mathematical Language in al-khwarizmi's Book *Al-Jabr wal-Muqabala*

The 'language of mathematics' is defined as the notational system used by mathematicians to convey their ideas and concepts to others. This linguistic style has specific (Ibid., p.129) characteristics, as it does not rely on the communication systems of natural human languages. However, it incorporates certain linguistic elements, precisely the mathematical terms often derived from general language. In addition, it employs a precise symbolic system that grants it expressive specificity for the mathematical formulations on which it is based. This language also relies on counting and

numbering systems, a necessity given the quantitative and calculative concepts it addresses.

This study aims to highlight the features of mathematical language within Arab thought by examining its key attributes and foundations through the work of Al-Khwarizmi – a pivotal figure in Arabic mathematics regarded by researchers as the progenitor of a new branch of mathematics. Al-Khwarizmi played a foundational role in uncovering the principles of this science, and we examine three core aspects of the language of algebra and mathematics, as presented in his book, *Al-Jabr wal-Muqabala*, which represents the initial model of Arabic algebraic principles.

First: Technical Terms (Mathematical Terminology)

Like other sciences, mathematics is distinguished by a specialised terminological system that sets it apart from different knowledge domains. Al-Khwarizmi was among the scholars who ventured into terminology development: "he was the first to coin the term 'al-jabr,' denoting a defined science with its rules, principles, and equations, and he enriched this science with new technical terms to represent objects and processes. " (Ibid., p.129).

In its early stages, Al-Khwarizmi's algebra was devoid of symbolic notation. Historical studies reveal that this form of notation was seen in Arabic mathematical writings in a later period, with early scholars relying on linguistic terms from the general lexicon, which were later endowed with narrower mathematical meanings.

In *Al-Jabr wal-Muqabala*, Al-Khwarizmi described the fundamental principles of algebra in a unique linguistic style that reflects the originality of his algebraic research. Despite his extensive translation work from these civilisations, he

used Arabic, which was unaffected by translation, and was free from Greek or Persian influences.

Examining Al-Khwarizmi's mathematical terms reveals that they originally come from a general vocabulary but semantically align with the mathematical concepts they represent. The historian of science Rushdi Rashed described Alkhwarizmi's approach to terminology: Al-Khwarizmi used existing words, retaining some meanings while assigning technical meanings to others, such as expressions for arithmetic operations or whole and fractional numbers. These terms were the same as those used by Al-Khwarizmi's predecessors and had similar meanings. However, some terms, such as 'shay شَيْء' (thing), belong to everyday language but gain technical meaning." (Rashed, M. 2009). Rashed noted that Al-Khwarizmi drew most of his terminology from the linguistic and literary resources of his time or earlier periods, describing the language in *Al-Jabr wal-Muqabala*: "The mathematical language in this book's section, as in other sections, came from the pre-Al-Khwarizmi lexicon and literary works of his predecessors. (Ibid., p.60).

Thus, Al-Khwarizmi's algebraic terminology formed a precise terminological system that constitutes the core around which the mathematical concepts in *Al-Jabr wal-Muqabala* revolve. Kamal Mahmoud explains, "Al-Khwarizmi discusses numbers and their types, or primary terms, which we call terms in modern algebra. He defines them in three types: roots, squares, and single numbers unrelated to roots or squares." (Hamoud, K. 1990). Some contemporary researchers have equated al-khwarizmi's terms with modern terms, adding symbolic notation:

- **Root:** What we now call the unknown (x), termed 'shay شَيْء' in algebra, is the unknown term in the equation.

- **Square:** The root multiplied by itself, or the square of the root = $\sqrt{x^2}$.

- **Single:** A number without a root or unknown.

- **Part of the thing:** The inverse of the root, or $\sqrt{\frac{1}{x}}$ (Ibid., p.120).

These fundamental expressions form the basis of Al-Khwarizmi's equations, which he formulated without symbols. For example, he writes, "One hundred and a square minus twenty roots plus fifty and ten roots minus two squares is one hundred and fifty minus a square and minus ten roots. " (Al-Khwarizmi, M. ibn M. 1937) Some terms, such as 'multiplication' and 'addition', remain in the Algerian educational system, whereas others, such as 'thing' and 'square', have fallen out of use. Still others have evolved in meaning but continue in educational contexts, especially terms such as 'roots' and 'single.'

Second: Algebraic Notation

Notation systems are critical components of mathematical expression and exceed the communicative goals of standard linguistic systems. Symbols represent a high level of intellectual abstraction, allowing for the conversion of linguistic representations of logical propositions into purely mathematical forms that are easy to use. Additionally, their universal adaptability facilitates cross-language learning and is noted for precision and consistency. (Ali, M. A. M. n.d.).

Although mathematical notation development lagged behind the evolution of mathematical inquiry, Arabs were ahead of the West in using notation to express their mathematical concepts. Evidence from scientific Arabic writings shows that Arab mathematicians utilised this method in their works, such as Abu Al-Hasan Al-Qalsawi, who used

the first letter of 'jidr جذر ' (root) as a symbol ($\sqrt{}$), 'شيء' (thing) as 'x' for the unknown, 'maal مال' (money) for $\backslash(x^2 \backslash)$, 'ka'b كعب' (cube) for $\backslash(x^3 \backslash)$, and 'laam ل' for equality (=) (Atiyya, A. A. H. 1991).

In recent years, these symbolic models have been removed from Algerian educational curricula and replaced by foreign symbols resembling graphical forms or letters from French or English alphabets. In earlier years, the Arabic notation system was used throughout all levels of education, except at the university level, where foreign languages dominate the teaching of this scientific subject, as seen in the following examples.

First Example: Extracted from the *Mathematics Book* for the Fourth-Grade Middle School Level

In this example, concepts are presented in Arabic, which serves as the language of instruction for specialised concepts in these books. This is evident in the following excerpt. (Sharabta, B. 2019)

Given a triangle ABC, AD is the median related to the side BC.

Let M be a point on [AD], which is distinct from A and D. The line that includes M and is parallel to (AC) intersects [BC] at point E. Similarly, the line that includes M and is parallel to (AB) intersects [BC] at point F.

1. Draw an appropriate diagram.
2. We prove that $DE/DC = DF/DB$, deducing that D is the midpoint of [EF].

In earlier stages, the Algerian educational system relied entirely on the Arabic language to present and explain mathematical concepts included in the scientific curricula across various educational levels. The example presented here tests this practice.

Definitions and Symbols

Consider the set 'مج' (M) representing a specified classroom. To express that a student 'ع' (A) belongs to this class or that it is an element of this class, we write:

$$ع \in \text{مج}$$

where the symbol ' $\in$ ' represents membership.

If the elements of 'مج' (M) are defined as {أ، ب، ج، د} (A, B, C, D), then we can write:

$$\{أ، ب، ج، د\} = \text{مج}$$

If the set 'مج' (M) does not include the element 'أ' (A), we write:

$$أ \notin \text{مج}$$

indicating that 'أ' (A) is not a set member.

If the number of elements in the set 'مج' (M) is undefined and these elements satisfy certain conditions, we can also use braces. For example, to represent the set of even integers more significant than the number 5 integers, we write the following:

$$\text{مج} = \{س \mid \text{س is an even integer, } س > 5\}$$

Second Example

Upon reviewing Al-Khwarizmi's mathematical books, notably his work *Al-Jabr wal-Muqabala*, we observed a complete absence of a notation system. Instead, he employed standard language to convey his concepts while relying on specialised terms, some examples of which we previously discussed.

Third: Numeration System (Arabic Numerals)

A mathematical numeral is 'the symbol used to represent a basic number, which includes the first nine numbers and zero.¹. Numerals hold great significance in mathematics and daily social transactions; thus, various human civilisations

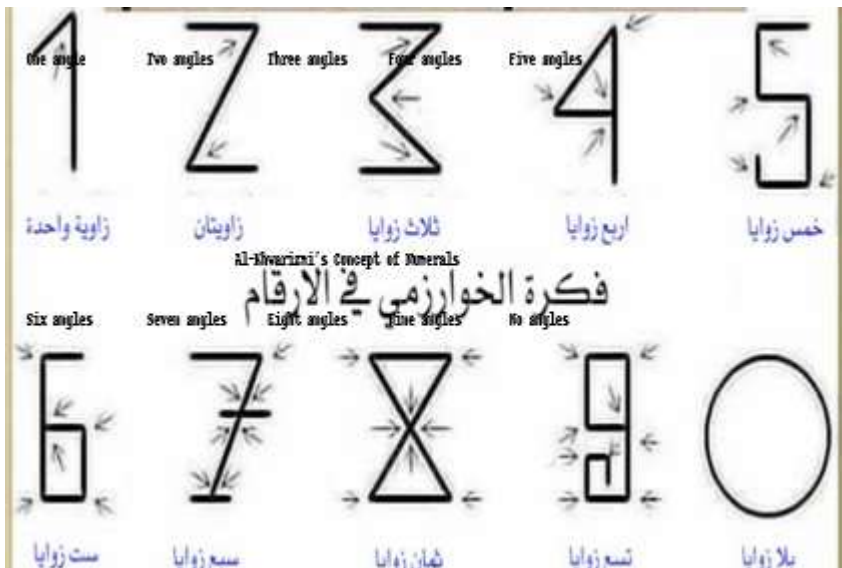
recognised and developed their unique numeral systems throughout history.

Arabs, like other civilisations, used this system in their transactions and their mathematical writings. "They expressed numbers in words written entirely, as seen on the 'Namara Stone' found among the ruins of Namara (in Hauran), dated to 328 AH. This is further confirmed by the 'Abraha Al-ashraf' text engraved on the famous Marib Dam (Ibid., p.13). Moreover, the Arabs applied a system known as 'Hesab Al-Jummal' (Abjad numerals), where numbers are represented by letters of the alphabet (أبجد هوز خطي كلمن). They utilised various counting systems, including 'finger counting' or 'hand calculations,' where different hand gestures represent numerous numbers. This system is an authentic Arab creation not borrowed from other nations (Ibid., p.19).

Moreover, owing to Al-Khwarizmi's efforts, Arabs were also introduced to Indian numerals. Al-Khwarizmi fundamentally modified the Indian numeration system, which initially lacked the number (0), as noted earlier. Through translating Indian mathematical texts into Arabic, he refined the system, which was then known as the 'Dust Numerals.' The Arabs named it so because they observed the Indians using a wooden board covered with fine dust for calculations (Ibid., p.30). Al-Khwarizmi did not merely adopt the original Indian numerals; he enhanced and refined them, creating what became known as 'Arabic--Indian numerals.' "One of the greatest contributions Arabs made to the world was introducing the Indian counting system and refining the Indian numerals, now commonly known as Arabic numerals in the West, as they were introduced to Europeans via Al-Andalus. " (Toukan, Q. H. n.d.).

Al-Khwarizmi based the design of Arabic-Indian (dust) numerals on the number of correct and acute angles each numeral represents. For example, the number (1) has one angle, (2) has two angles, and so forth, as illustrated below:

Figure 1: Al-Khwarizmi's angular numeral system: an early conceptualisation of Arabic numerals



Al-Khwarizmi aimed to provide specific symbols that people could use as alternatives to words and letters in various aspects of life through his numeral design modifications. The influence of Al-Khwarizmi's Arabic numerals reached Europe, where they were known as "Arabic numerals." In recognition of the Arab contribution in this area, German orientalist Sigrid Hunke states, "The Arabs' numbers, their instruments, which they perfected almost completely, their calculations, algebra, and science... all are Arab gifts to the

West that elevated Europe to a position enabling it, through its inventions and discoveries, to lead the world." (Hunke, S. 1992). This is evidence that Europe was among the greatest beneficiaries of Arabic thought in numeration. Arabic numerals remain the standard numeric system used in Western countries, while their primary use in the Arab world is now concentrated in the Maghreb region. In contrast, Arabs in the Levant and Eastern Arab countries have adopted mainly what are known as "Eastern Arabic numerals," which are of Indian origin.

Conclusion

From the preceding discussion, it is evident that Al-Khwarizmi is among the greatest and most esteemed mathematicians in the history of human thought. He played a significant role in establishing the principles of algebra, subjecting it to an unprecedented scientific methodology. His work was structured in an organised, classified, and refined system, and he also made notable contributions to the numeration system, which became the foundational pillar on which various mathematical concepts are built. Modern mathematics, both in the Arab and Western worlds, still employs this system today.

In summary, Al-Khwarizmi is a series of Arab scholars who left remarkable contributions across various fields of knowledge, opening vast avenues for human civilisation to advance and progress. Although many voices deny this truth, claiming that Arabs merely transmitted the intellectual heritage of earlier civilisations, they overlook that civilisation is a continuous chain, with each link building on its predecessors. The Arab contribution, particularly embodied

in the genius of Al-Khwarizmi and his followers, preserved and expanded upon the Greek, Indian, and other heritages, ultimately transmitting this invaluable knowledge to the West and many of their innovations.

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Digital Transformation in Parliamentary Libraries in Algeria: The National Assembly Library as a Model

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Abstract

Parliamentary libraries are considered an important part of legislative institutions. In light of technological development and digital transformation, it has become necessary for these libraries to keep pace with this development based on information and communication technology, which has become an essential element that cannot be dispensed with. Therefore, parliamentary libraries must be equipped and take on the policy of transitioning to the digital age with the aim of providing services to deputies and members of parliament with the highest degree of speed and efficiency. In order for parliamentary libraries, especially the National Assembly Library - the library under study - to be able to access the digital world and transform from a traditional library to a digital library, it must follow a clear mechanism prepared in a smooth manner by information specialists so as not to stumble while venturing into the digital world. Through this study, we aim to identify the efforts of the National Assembly Library and the extent of its contribution to the process of digital transformation and the digital information services it provides and offers.

Keywords : Digital transformation - Digital library - Parliamentary libraries - National Assembly - National Assembly Library

Transformation numérique dans les bibliothèques parlementaires en Algérie : cas de la bibliothèque de l'Assemblée Nationale

Resumé

Les bibliothèques parlementaires sont considérées comme un élément essentiel des institutions législatives. Face au développement technologique et à la transformation numérique, il est devenu nécessaire pour elles de s'adapter à cette évolution grâce aux technologies de l'information et de la communication, devenues un élément essentiel incontournable.

Les bibliothèques parlementaires doivent donc s'équiper et s'engager dans la transition numérique afin de fournir des services aux députés et aux parlementaires avec la plus grande rapidité et efficacité. Pour que les bibliothèques parlementaires, et en particulier la Bibliothèque de l'Assemblée nationale, puissent accéder au monde numérique et passer d'une bibliothèque traditionnelle à une bibliothèque numérique, elles doivent suivre une stratégie claire, bien définie par des spécialistes de l'information, afin d'éviter tout échec lors de leur passage au numérique. Cette étude vise à identifier les efforts de la Bibliothèque de l'Assemblée Nationale et l'étendue de sa contribution au processus de transformation numérique, ainsi que les services d'information numérique qu'elle propose.

Mots- clés : *transformation numérique – bibliothèque numérique – bibliothèque parlementaire – Assemblée nationale – bibliothèque de l'Assemblée Nationale*

Introduction

Parliamentary libraries are considered an important part of legislative institutions, as they provide specialized information services that support parliamentary work. In light of technological development, digital transformation, and the modernization of sectors, it has become necessary to digitize these libraries and consequently digitize the services they provide to enhance access to information and improve work efficiency. Therefore, it has become necessary at the present time for parliamentary libraries to keep pace with this development based on information and communication technology, which has become an essential element that cannot be dispensed with.

Therefore, parliamentary libraries must be equipped and take on the policy of transitioning to the digital age with the aim of providing services to deputies and members of parliament first and foremost with the highest degree of speed and efficiency. For this to be achieved, these libraries must employ information and communication technology in all their tasks and management, from acquisition and subscriptions to the dissemination and distribution of information. In order for parliamentary libraries, especially the National Assembly Library - the library under study - to be able to access the digital world and transform from a traditional library to a digital library, it must adopt or follow a strategy or mechanism with clear features prepared in a smooth manner by information specialists so as not to stumble while venturing into the digital world. Through this approach, the main problem of this work is centered as follows:

What are the efforts of the National Assembly Library taken for digital transformation? And has it taken the necessary measures and mechanisms for that?

To answer the main problem, we formulated the following sub-questions:

- 1- Does the National Assembly Library have the necessary material and financial resources for digital transformation?
- 2- Does the National Assembly Library have qualified human resources?
- 3- What digital information services are available and provided by the National Assembly Library to its users?
- 4- Does the library under study rely on information and communication technology in performing its tasks?
- 5- What are the difficulties and obstacles facing the National Assembly Library?

Objectives of the Study

Through this study, we seek to reveal the efforts of the National Assembly Library for digital transformation. And we aim through it to achieve a set of goals, which are:

- Identifying the mechanism followed by the National Assembly Library for digital transformation.
- Determining the availability of necessary material and financial capabilities and qualified human resources in the library under study for digital transformation.
- Identifying the various digital services that the National Assembly Library provides and offers to its users.
- Identifying the various techniques and software that the library relies on.

- The extent to which the library under study relies on information and communication technology in performing its various tasks.
- The difficulties and obstacles facing the National Assembly Library.

Study Methodology

To achieve the objectives of the study, the descriptive approach was adopted as it is the most appropriate methodology for this type of study. Observation and interviews were also used as data collection tools to obtain answers to the formulated questions. Therefore, an interview guide was prepared, and the interview was conducted with the Deputy Director of the Library and Archives of the National Assembly.

1. Definition of Terms

1.1. Parliamentary Library

Parliamentary libraries are essentially specialized libraries that primarily serve members of parliament and their research assistants. Not only this, but parliamentary libraries also serve editors of various media outlets, especially those that follow different parliamentary activities. (Al-Housh, 2010)

Parliamentary libraries are of great importance due to the role they play in serving members of parliament and its staff, working to meet their various needs, which enables them to carry out their parliamentary duties and responsibilities to the fullest.

Parliamentary libraries are considered a type of specialized library serving beneficiaries, who are naturally members of parliament, in addition to a group of researchers, assistants, and aides. This type of library also plays a funda-

mental role in preserving and storing parliamentary documents. (Al-Housh, 2010)

The primary goal for which parliamentary libraries were established is to facilitate the process of transferring and circulating information sources in all their forms and origins, and to harness them to serve members of parliament and other visitors to the libraries, including the collection of materials and documents that express the activity of parliament. (Al-Housh, 2010)

These libraries also aim to help their beneficiaries from among parliament members by providing all kinds of services that meet their needs and guide them to appropriate information sources outside the libraries.

1.2. Digital Library

A digital library is one in which electronic resources form all of its contents, and it may not need a building to contain it, but rather a network that connects it to terminals for use. (Jassim, 2009)

Digital libraries are merely modern forms of information retrieval systems, or information systems that support the production of digital content, benefiting from it and searching in it.

A digital library is also defined as a library that acquires digital information resources, whether originally produced in digital form or converted to digital form, and carries out bibliographic control processes using an automated system, and access to it is available through a computer network, whether local or extended through the Internet. (Jassim, 2009)

Jafar Hassan Jassim defines the digital library as "libraries without walls, and they do not have a specific entity or exist in a specific geographical location, and they depend com-

pletely on information sources of a digital electronic nature only, whether originally produced in digital form, and there is no place for traditional library materials. The beneficiary can access its contents via computer or the Internet." (Jassim, 2009)

There are many definitions for the term "digital libraries," including, for example: "electronic library," "virtual library." This term or that is often used interchangeably, and the common definition elements of these terms consist of the following elements: (Al-Arini, 2010)

1. The digital library is not a unique or independent entity.
2. The digital library requires technology to connect it to numerous resources.
3. The links between digital libraries and information services are clear to the end user.
4. International availability of digital libraries and information services is the ultimate goal.
5. Digital library collections are unlimited and not a substitute for documentary collections, and digital materials are not represented or distributed in printed form.

Among the most important features of the digital library are: (Al-Zahri, 2009)

1. Control over digital information vessels is easy and more accurate and effective than the traditional level, in terms of organizing data and information, and they are stored, preserved, and updated in a way that helps beneficiaries quickly access information.
2. The researcher benefits from the capabilities of the digital library when using word processing software, machine translation software when available, and sta-

- tistical programs, as well as benefiting from the capabilities of the hypertext system and multimedia.
3. The possibility of obtaining information and service remotely, overcoming spatial barriers and borders between countries and regions, saving effort and time, and the researcher can obtain information from where they are located.
 4. It is possible to search and borrow from it at all times without the restrictions of official working hours.
 5. The possibility of benefiting from information sources and browsing them at the same time by a large number of researchers.
 6. Digital libraries develop community culture about the importance of information and help spread digital cultural awareness and encourage researchers and authors to take advantage of multimedia.
 7. Keeping pace with technical progress in the world and exploiting the existence of greater facilities to access information networks.
 8. Self-service, and thus the burden on the library and its employees is reduced, and their efforts are invested in other tasks.

2. Requirements for the Transition to a Digital Library

The option of transitioning to a digital environment for libraries remains a goal that requires a lot of effort and directed work to achieve objectives. However, the transformation options for information institutions and libraries that have completed the computerization experience completely and absorbed all its aspects will be, in any case, easier than carrying out the process of transitioning from traditional work to the digital environment. Therefore, the digital transformation strategy always starts from the end of the transi-

tion to computerized work. Among the reasons and motives for transitioning to the digital environment are: (Al-Zahri, 2009)

1. The need to develop services and provide them faster and better to satisfy the community of beneficiaries of its services.
2. Availability of necessary equipment and tools for building digital libraries, with appropriate technical expertise.
3. The existence of many information vessels in digital form.
4. Facilitating connection to the Internet and making it available to the community of beneficiaries.

Working on establishing or building a digital library poses serious challenges, because converting traditional materials to digital materials will not be easy. Therefore, to create a digital library, we must go through several stages, the most important of which is introducing informatics in the basic functions of the traditional library, which include supply, cataloging, lending, and others, and computerizing most of its procedures, then digitizing the contents of collections. For all this to happen, some requirements must be met, which are: (Jassim, 2009)

1. Legal and regulatory needs, as the library must obtain special permission from the copyright and intellectual protection rights holder when converting its textual materials from reports, research, articles, and others to forms that can be read automatically.
2. The availability of specialized devices to connect the library to an internal communications network and the global Internet.

3. Needs for technical devices to convert information materials from traditional to digital, in addition to computer devices and various communications, advanced laser printers, scanners, and imaging devices.
4. Providing software and protocols to link online information retrieval systems.
5. Subscription to electronic journals.
6. Linking between electronic journal sites and journals contained in the automated catalog system in the library.
7. Needs for programs and protocols for linking and retrieving information, especially those related to the Arabization of computer systems.
8. Qualified technical human needs capable of dealing with these modern technologies in their material and intellectual aspects, meaning in other words, providing sufficient and trained human resources with the necessary competence to manage information systems based on computers and having the ability to accomplish the following tasks: a. Selection of information that can be disseminated. b. Entering information in different forms, meaning being able to deal with information vessels in form and content. c. Skills in retrieval systems, which have technological and thematic dimensions at the same time.
9. Providing the necessary financial support that helps implement the digital project.
10. Providing and creating information awareness among researchers and beneficiaries of digital library services, and perhaps this need is the most important, because what is the benefit of providing all the aforementioned supplies and there is no one who appreciates or values the value of this project.

2.1. Overview of the National Assembly

The Algerian parliamentary system is based on the principle of bicameralism or dual chambers, which is known as parliamentary dualism, as is the case in many countries of the world today (more than seventy countries adopt this dual parliamentary system).

Article 114 of the Constitution states: "Legislative power is exercised by a parliament consisting of two chambers, namely the National People's Assembly and the Council of the Nation (National Assembly). Each chamber of the parliament has sovereignty in preparing and voting on laws."

The National Assembly consists of 144 members. Two-thirds ($2/3$) of its members are elected through indirect and secret universal suffrage from among and by members of the Municipal People's Councils and the Wilaya (Provincial) People's Council, with two members (02) per wilaya (Article 121 of the Constitution), totaling 96 members. The President of the Republic appoints the other third ($1/3$), i.e., 48 members, from among national personalities and competencies in the scientific, cultural, professional, economic, and social fields (Article 121 of the Constitution).

Membership in the National Assembly requires reaching the age of thirty-five (35) years. The term of a member of the National Assembly has been set at six (06) years, with half of the Council's members being renewed every three (03) years, a process called partial renewal (Article 122 of the Constitution).

2.2.. Role of the National Assembly

The existence of a second chamber in the modern parliamentary system has become necessary in order to achieve a

set of objectives, the most important of which are: (<http://www.majliselouma.dz/>)

- Consolidating pluralistic democracy and free expression in the legislative institution;
- Ensuring good national representation that is more diverse, complementary, and harmonious by adopting the criterion of territory alongside the criterion of population;
- Promoting and activating decentralization to the national level by activating and creating new dynamics in local communities;
- Ensuring balance between state institutions and maintaining their stability.

The functioning and organization of the National Assembly is governed by founding texts (the Constitution) and regulatory texts, mainly Organic Law No. 99/02 dated 20 Dhu al-Qi'dah 1419 H, corresponding to March 8, 1999, which determines the organization of the National People's Assembly and the National Assembly, their functioning, as well as the functional relationships between them and the government; and in the internal regulations of the National Assembly, which the Council approved in a public session on 24 Ramadan 1418 H, corresponding to January 22, 1998.

3. Digital Transformation at the National Assembly Library

3.1. Presentation of the National Assembly Library

The establishment of the National Assembly Library dates back to 2003, which was attached to the Deputy Directorate of Documentation and Archives, which in turn belongs to the Directorate of Publications and Documentation, which reports to the Director General of Legislative Services. How-

ever, when the National Assembly was established in 1997, a reading room was created during that period.

The library serves:

- Members of the National Assembly,
- Staff and employees of the National Assembly,
- University students and professors.

The library includes:

- **Reading Room:** Can be used by beneficiaries from National Assembly members or employees, as well as students and professors.
- **Storage Areas:** The National Assembly Library has two (02) storage areas with a storage capacity of approximately 50,084 documents.

3.2. Human Resources at the National Assembly Library

The human element is considered among the most important resources that must be invested in because it is one of the basic and main components in performing the tasks and mission of the library. The following is a table showing the number, specialization, and ranks of employees at the National Assembly Library.

Table 1: Human Resources at the National Assembly Library

Number of Employees	Specialization/Level	Tasks
01	Law	Deputy Director of Library and Archives Managing the library and archives and coordinating between various departments

		Implementing the deputy directorate's program
01	Management and Economics	Head of Library Department In charge of organizing the library
03	Two specialized in translation One specialized in accounting	Acquisition and processing of books and their indexing
02	University level	Providing lending services
03	Secondary level	Assistance in lending service Arranging and organizing books

Table No. (01) illustrates the distribution of human resources in the Council of the Nation Library. What can be observed is the complete absence of even a single information specialist among the ten (10) employees. (The library was previously managed by a specialist in library and documentation science who has since left the position). This is considered a negative point which will certainly have adverse effects on the library's tasks and activities. We find:

- The primary official, i.e., the Deputy Director of the Library and Archives, specializes in law.
- The Head of Library Services who is in charge of managing the library has a specialization in management and economics.

Meanwhile, the remaining eight (08) employees include:

- Three (03) employees, two of whom specialize in translation and one in accounting, whose main task is acquisition and processing, thus receiving and cataloging books.
- Two (02) employees at secretary level, who were transferred from administrative services to the library, are responsible for handling the lending service.
- Three (03) employees with secondary school level education, whose task is organizing and arranging books in storage and assisting with the lending service.

Regarding Acquisitions

- In the early years of the library's establishment, according to the Deputy Director of the Library and Archives, publishers were contacted to request books and periodicals based on the needs of users that were identified in advance. On this basis, frequently requested books or those related to the Council's mandated tasks and needed by members were purchased.
- Currently, after the required titles are identified by users, the purchasing process is done directly from the book fair, acquiring collections related to the Council's specialization and activities in order to support legislative activity.
- As for national and international newspapers, despite their availability in electronic format, subscription to the paper version continues to this day due to the Council of the Nation members' insistence on obtaining the paper version.

Regarding Processing

- The processing carried out by employees does not follow any international standard; it is merely based on customary practice. This confirms the absence of information specialists within the human resources, which has negatively affected this operation.

3.3. Collections

The following table represents the collections of the Council of the Nation Library distributed according to subjects covered by the library.

Table No. (02): Collections in the Council of the Nation Library by Subject (Library Work Report as of 31/12/2024)

Subject Area	Number of Items
Law	13147
History	7326
Economics	3779
Encyclopedias and Dictionaries	3702
Politics	3247
Literature	2936
International Politics	2789
Sociology	2238
Administration, Management and Development	1899
Media and Communication	1263
Philosophy	1204
Education	1162
Religion	1087
Culture and society	819
Political economy	729

Political history	688
Psychology	498
Parliament	450
Environment	366
Technology	284
Urban planning	193
General studies	139
Medical sciences	101
Agriculture	38
Total	50084

Table No. (02) illustrates the distribution of collections available in the Council of the Nation Library, which totals 50084 books distributed among various subjects according to their importance, where we find:

Law takes the first place in the categorization of books with an estimated 13147 titles, which aligns with the mission of the Council of the Nation, which is to exercise legislative authority. Therefore, members or library beneficiaries need references and resources in the field of law. Consequently, we can say that there is compatibility between the holdings and the mission of the Council of the Nation.

As for the rest of the holdings, we find books on varied subjects including: history, economics, politics, encyclopedias and dictionaries, literature, international politics, sociology, administration, management, media and communication, etc.

Therefore, the available holdings cover almost all specializations and subjects. What can be said is that those in charge of library management have provided, to some extent, diverse holdings aimed at meeting the needs of beneficiaries while taking into account the mission of the Council

of the Nation, which is to exercise legislative authority, as evidenced by the legal books that top the list.

3.4. Library Management System

Since the library's establishment, it was using the winisis program, but work with it ceased in 2011 due to the discontinuation of updates for the program itself. Therefore, the IT department transferred the database that existed under the winisis system to Excel, which is still in use up to now.

3.5. Information Services Provided by the Council of the Nation Library

The library services provided by the Council of the Nation Library are as follows:

- Internal and external lending service.
- Printed catalog.
- Selective dissemination of information service.
- Copying service.
- Translation service: where there is a department responsible for this task in the Council.
- Subscription service to national and international daily newspapers.
- The library provides an indicative and analytical bulletin of newly acquired books and distributes it to committees and members of the Council of the Nation.
- Telephone communication service: where Council of the Nation members or committee chairs can call to request information or reserve a book.

Regarding the available services provided by the Council of the Nation Library, it can be said that they are very limited services, which confirms the absence of information specialists within the library's human resources, negatively

affecting the number and quality of services provided in the third millennium, which is subject to information and communication technology in all its activities and tasks.

3.6. Digital Information Services Provided by the Council of the Nation Library

The digital services provided by the Council of the Nation Library include:

- Current awareness service: where a list of new acquisitions is sent continuously
- Email service
- Internet service

Discussion of the Study Results in Light of the Guidelines for Parliamentary Libraries (IFLA. Guidelines for parliamentary libraries. 3rd ed. 2022)

Information and communication technology plays a vital role in modern parliamentary libraries, as it facilitates access to information and data more efficiently and quickly. For this reason, IFLA in the third edition of the Guidelines for Parliamentary Libraries of 2022 dedicated a special chapter on information and communication technology policy within parliaments and the role of the library and research service[1]. In this chapter, we find a description of some specialized information and communication technology systems used by parliamentary libraries. It also addresses the increasing importance of parliamentary information resulting from parliamentary activity and publications. It briefly discusses how social media is used in parliaments.

The use of information and communication technology and digital tools in parliaments has come a long way during the ten years that have passed since the previous edition

(second edition 2009) of these guidelines. Internet and mobile phone services are widely used, while cloud computing in some parliaments reduces dependence on internal ICT infrastructure. Providing access to information services, research products, and parliamentary documents to their clients remains the main focus of the parliamentary library and research service, but this is likely to be increasingly delivered via intranets through the internal network or the internet, or through social media. Parliamentary libraries are likely to be creators of digital content as well as being secure repositories for it.

Given the importance of information and communication technology in parliamentary work, especially since the COVID-19 pandemic, the Inter-Parliamentary Union conducts a biennial survey on the use of ICT in parliaments and publishes its results in the World e-Parliament Report. This can be considered a good starting point that parliamentary libraries intending to adopt information and communication technology in the future can rely on.

A full chapter has been dedicated to the services that parliamentary libraries should provide, which depend on the number of resources available in the library and which can be summarized as follows: (IFLA. Guidelines for parliamentary libraries. 3rd ed. 2022).

3.7. Collection Services

Many parliamentary libraries maintain collections of physical materials, such as newspapers, books, and magazines, for reference or lending. The parliament's own records, such as debates, committee minutes, and reports, are an essential part of the library's collections.

The library may provide a book lending service for local acquisitions, and may also provide a service to obtain books

from external libraries, to supplement materials that cannot be provided from its own collections. Some libraries have close relationships with national libraries or other specialized libraries to meet these requirements. In some cases, the parliamentary library also functions as a national library. Some parliamentary libraries, whether national or not, are open to the public.

It is also necessary for the parliamentary library to have:

- Digital collections: and to provide access to these collections primarily for beneficiaries "anytime, anywhere," especially after the coronavirus pandemic.
- Lists of electronic resources.
- A catalog for parliamentarians to see what is available in the library.
- Comprehensive guides on how to search for information.
- A tool that enables users to chat online with the librarian.

3.8.- Library and Information Services

Among the library and information services that parliamentary libraries must provide:

- Reference or informational services: providing accurate and timely information in response to parliamentarians' questions. These services may include direct requests for facts or information, or may be complex requests that require comprehensive research in references.
- The reference and information service includes helping the parliamentarian (or their staff) identify appropriate information sources so they can research on their own. This may be through responding personally by phone or email, or in the case of repeated ques-

tions, reference lists and information guides can be created and published on the library's website so that beneficiaries can use them whenever necessary.

- Many parliamentary libraries also meet parliamentarians' need for awareness of the latest developments through news organization services.

3.9 Research Services

The parliamentary library may include a research service, which is more in-depth than the reference and information service, where specialized policy analyses and briefings are provided to parliamentarians.

This can be done in various ways, but typically the research service provides materials available to everyone (such as briefings on new legislation or current "hot" topics) and materials specifically designed to meet the needs of each parliamentarian individually in response to specific requests.

Research services generally require subject expertise and are likely to be provided by an independent department within the parliamentary library.

3.10. Digital Services

Many parliamentary libraries are involved in providing or supporting access to digital information, platforms, and products. This service is considered part of the library's role in acquiring and managing collections, and providing information and research services.

Digital services can be provided through:

- Digital platforms through which information is published and made available internally and to the public.

- Design and organization of materials on the internet and intranet.
- Development of user-friendly websites and web pages.
- Preparation of search tools for the library's website, and sometimes for the parliament's website.
- Development of digital repositories.

3.11. Publications, Preservation, and Archiving

Some parliamentary libraries are also tasked with preserving the history of parliament (records of previous membership, members' papers), and many have programs to publish and promote special collections or collections addressing specific topics that may be important during a legislative session or for a special occasion (international meeting, anniversary, etc.). In some parliaments, the archive forms a subsection of the library, while in other parliaments, archives form a separate service. These services may require special skills and resources, and with digital information, close collaboration with ICT staff is expected.

According to what we found in our study, and from the total services mentioned in the main principles for parliamentary libraries, the Council of the Nation Library provides:

- Newspapers, books, and magazines.
- A list of documentary holdings preserved in the library.
- Very limited electronic services confined to:
 - Email service: used to send lists of new acquisitions and current awareness service.

- Automated search service: the library provides an Excel file for searching through computers available in the reading room.
- Providing the Council's bulletin which was previously distributed in paper form and is currently sent via professional email.
- Internet service: the reading room has computers with internet access.
- Lack of specialized software for managing documentary holdings; instead, there is an Excel file for beneficiaries to search through.

Based on what has been identified regarding information services and electronic information services provided by the Council of the Nation Library, it can be said that these services are very limited, which can be attributed to the following reasons:

- The absence of information specialists or librarians within the human resources of the library under study has negatively affected the number and quality of services provided, not to mention digital services.
- Not giving priority to library digitization and service automation.
- Not using information and communication technology in various library activities and tasks.

Regarding the use of information and communication technology in parliamentary libraries, we find: (IFLA. Guidelines for parliamentary libraries. 3rd ed. 2022)

1-Main principles for using information and communication technology in parliamentary libraries

The use of information and communication technology in parliamentary libraries is determined by a set of factors identified as follows:

- ICT infrastructure in the country

- The availability of resources
 - The vision and determination of managers
- In order to use ICT in in parliamentary libraries we have to, first, answer the following questions:
- Governance: Who will be responsible for making and implementing future strategic and policy decisions?
 - Service Accessibility: How and where will parliamentarians access digital services? Is there a need for mobile solutions or remote access capabilities? What security measures must be implemented to protect services and data? Remote access became a top priority for parliamentary libraries during the Covid-19 pandemic. Going forward, services accessible only from library terminals are likely to be considered inadequate.
 - Service Prioritization: Which priority services should ICT enable or enhance (such as online access to official proceedings records, electronic submission of questions, motions, amendments, etc.)? How will service continuity be maintained during disruptions?
 - Digital Content Management: How will digital content be organized, managed, and developed? Incorporating subject and keyword metadata with data, documents, and files will enable effective user searching and retrieval. While adding metadata after content creation presents greater management challenges, information specialists' expertise remains essential in either approach.

3.12. Specialist digital systems

According to the guidelines, modern parliamentary libraries should provide specialized digital systems such as

electronic databases that allow parliamentarians access to comprehensive research and information resources. It is important that these systems are easy to use and provide effective ways to search for and organize information.

Specialized digital systems that can be used in parliamentary libraries also include tools for storing and organizing documents, archiving information, and tools for searching available digital content. It is also necessary to provide electronic tools such as email and internet.

According to our study findings, the library under study employs email and internet through which communication with parliamentarians takes place.

3.13. Internet and intranet

Parliamentary libraries are responsible for designing and developing websites and internal networks for the parliament, as these systems will enable parliamentarians to access a wide range of resources such as reports, articles, and research at any time and from anywhere, whether inside or outside parliament.

From the information obtained, there is internet in the reading room in the library under study, but there is no internal network.

3.14. Parliamentary data

Parliamentary libraries contain significant parliamentary data, including legal texts, legislation, government reports, and parliamentary records. Managing this data effectively and providing quick access to it is one of the main challenges for parliamentary libraries in the digital age. It is important that this data is organized in a way that makes it easy for parliamentarians to access and analyze.

3.15. Social media

Social media plays an increasingly important role in parliamentary work. Parliamentary libraries can use social media to interact with the public and provide important information about parliamentary work. It can also be used to enhance transparency and engage citizens in political discussions. Parliamentary libraries must be able to manage and organize content published on social media in a professional manner that ensures the provision of correct and reliable information.

Conclusion

In the third millennium and digital transformation, it has become necessary to access the digital environment. Therefore, bodies and institutions that hold part of the intellectual heritage must keep pace with scientific and technological developments, with the aim of making it available to their users through websites and electronic platforms.

It has become clear through this study that the efforts of the Council of the Nation Library as a library with an important role in legislative activity at the state level in the process of digital transformation and automation of information services are insufficient and very limited to advance this heritage and preserve and protect it from damage and loss. Therefore, it is necessary to reconsider the management and administration policy of the library and develop a model vision for the digitization project of the Council of the Nation Library in accordance with the principles and guidelines of international organizations.

The great challenge remains to digitize this national heritage while ensuring the ease of its preservation and dissemination, as well as creating new mechanisms to introduce it, because the goal of the digitization process is to facilitate for beneficiaries the opportunity to find information with minimal effort and time, and to shorten distances, thus ensuring the preservation of documents in the long term and hence the continuity across generations. As a conclusion to this study, we decided to develop a set of recommendations that we summarize as follows:

- The necessity of employing information specialists with continuous training and development
- Digitize the documentary series from acquisition to lending
- Acquire digital collections and subscribe to electronic periodicals
- Abandon paper newspapers that cost a considerable budget and subscribe to digital newspapers available on websites
- Acquire scanners to digitize tables of contents and book covers (since the entire book cannot be digitized as it conflicts with copyright law)
- Acquire specialized systems and software to manage all library activities
- Prepare a catalog of library collections and make it available via the library's website to enable beneficiaries to view the library's collections and reserve the appropriate title
- Given the widespread use of smartphones, it was necessary to create various applications that enable beneficiaries to see new library acquisitions or digital books

- Provide current awareness and selective dissemination services digitally
- The necessity of creating a library website that includes necessary information to introduce the library, its establishment, organization, internal system, and how to contact it
- Possibility of remote registration
- Digitize the library's holdings
- Make electronic resources available
- Create social media sites for the library
- The necessity of involving beneficiaries in developing the collection electronically

Despite the considerable efforts made by the library staff at the Council of the Nation, the absence of specialists in library and documentation science has negatively affected the activity of the library, especially with regard to applying international standards in processing and classifying the collection.

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Emerging Languages and the Digital Preservation of Endangered Tongues: Translational Perspectives

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Abstract:

This article addresses the complex relationship between translation and the preservation of endangered languages in the context of digital transformations, with a particular focus on the impact of emerging language forms within digital communication spaces. This newly developed language is characterized by abbreviations, linguistic blending, and the extensive use of emojis, leading to the diminished presence of native languages and the reshaping of cultural identities. The article analyzes the challenges associated with translating this type of discourse, especially considering the loss of emotional nuances, the absence of symbolic equivalents for emojis, and the difficulty of conveying the hybrid characteristics of digital speech. It highlights the limited availability of digital translation tools tailored to vulnerable languages, which further deepens the digital divide. The article also emphasizes the need for a comprehensive approach that combines the development of digital infrastructure, the training of translators to handle non-standard languages, and the adoption of interactive translation strategies that respect the cultural specificities and networked identities of speakers.

Keywords: languages, preservation, translation, endangered languages, digital transformations, linguistic forms

Langues émergentes et préservation numérique des langues en danger : Perspectives translationnelles

Résumé :

Cet article traite de la relation complexe entre la traduction et la préservation des langues en danger dans le contexte des transformations numériques, en mettant l'accent sur l'impact des formes linguistiques émergentes dans les espaces de communication numérique. Ce nouveau langage se caractérise par des abréviations, des mélanges linguistiques et l'utilisation intensive d'emojis, ce qui entraîne une diminution de la présence des langues maternelles et un remodelage des identités culturelles. L'article analyse les défis associés à la traduction de ce type de discours, notamment la perte des nuances émotionnelles, l'absence d'équivalents symboliques pour les emojis et la difficulté de transmettre les caractéristiques hybrides du discours numérique. L'article souligne la disponibilité limitée d'outils de traduction numérique adaptés aux langues vulnérables, ce qui aggrave encore la fracture numérique. L'article souligne également la nécessité d'une approche globale combinant le développement de l'infrastructure numérique, la formation des traducteurs au traitement des langues non standard et l'adoption de stratégies de traduction interactives qui respectent les spécificités culturelles et les identités en réseau des locuteurs.

Mots clés : *langues, préservation, traduction, langues en danger, transformations numériques, formes linguistiques*

Introduction

Linguistic diversity constitutes one of the most significant manifestations of humanity's cultural richness, as language serves both as a natural vehicle for culture and a guarantor of its transmission across generations. However, this diversity is currently facing an unprecedented threat, as numerous natural languages around the world are at risk of extinction. UNESCO reports indicate that at least 40% of the world's languages are endangered, placing humanity before the imminent loss of an immense intangible heritage (UNESCO, 2011).

In recent decades, there has been a marked increase in attention to the fate of endangered languages, particularly in light of the global expansion of dominant languages, most notably English, across the domains of media, education, and technology. These shifts have led to a reshaping of the global linguistic landscape, with many local languages facing decline or disappearance, largely due to factors such as digital dominance. Within this context, the digital environment—particularly social media platforms—has generated a non-traditional communicative space where languages interact and expressive modes intertwine. This has given rise to what may be termed an "emerging language," a phenomenon that raises critical questions about the future of linguistic diversity worldwide. Faced with this reality, translation emerges as a pivotal yet problematic tool in the struggle against language extinction. On the one hand, translation can enhance the presence of vulnerable languages within the digital sphere; on the other hand, it may inadvertently reinforce their subjugation to dominant linguistic and cultural norms. Accordingly, this study proposes an analytical ap-

proach to examining the role of translation in safeguarding endangered languages by deconstructing the relationship between the "emerging language" and translation practices on social media platforms, which function as arenas for the reconfiguration of linguistic expression and identity—and which may simultaneously serve as a site of linguistic threat or as a means for linguistic empowerment.

Research Problem and Objectives

Despite the global recognition and consensus on the threat of language extinction—given that these languages carry rich cultural heritage and long histories—efforts to protect them remain limited, particularly in countries with significant cultural and linguistic diversity. In this context, and in light of the rapid digital transformations witnessed by contemporary society, social media platforms have become an open linguistic space, reshaping communication patterns. Concurrent with this shift, concerns are growing regarding the fate of endangered languages, which face the dual threats of digital marginalization and cultural erosion. This situation raises a central question regarding the role of translation: Can translation be considered a tool to protect vulnerable languages from fading by integrating them into the digital sphere? Or does translation, when subjected to linguistic dominance (e.g., English), contribute to reproducing dependency and reinforcing the disappearance of linguistic diversity? What impact does the "emerging language" on social networks have on the functions of the native language? Does this emerging language represent a genuine threat or an opportunity for reshaping linguistic identities?

Based on these questions, this research aims to analyze the complex relationship between translation, emerging language, and the protection of endangered languages through

a case study of linguistic and translational practices on social media platforms. The goal is to identify the potential of translational intervention in safeguarding linguistic memory and cultural identity. Thus, addressing the topic "**Emerging Languages and the Digital Preservation of Endangered Tongues: Translational Perspectives**" requires a multi-methodological approach that aligns with the complex nature of the phenomenon under study, where linguistic, social, and digital dimensions intersect. From this perspective, the research is grounded in a sociolinguistic framework, as it offers a suitable lens to understand the transformations occurring in the use of native language within digital spaces by analyzing communication patterns, the distribution of linguistic competencies, and interactions between native languages and dominant languages. A digital discourse analysis methodology is also employed to deconstruct the structure of the "emerging language" as it manifests in posts and interactions on social media platforms, focusing on symbols, abbreviations, and hybrid patterns that may impact the continuity of the native language or neutralize it. This analysis is complemented by a descriptive-analytical approach that allows for the observation of linguistic and translational phenomena as they manifest in the field, along with a critical reading of translational practices in the digital context. This topic is both urgent and necessary for contemporary studies due to the rapid technological advancements and the evolution of the digital space, especially following the global health crisis triggered by the COVID-19 pandemic, which accelerated the world's focus on digitization. This shift has dramatically affected the nature of digital communication, leading to the continuous emergence of new forms of language. Therefore, the emerging language in the digital

space is not static but evolves rapidly, making the topic a rich field for new academic studies. Furthermore, while many studies have addressed the impact of technology on global languages, endangered languages have not been sufficiently studied within the digital space context. As the linguistic dominance of languages like English on online platforms increases, it becomes crucial to analyze how these phenomena affect less widely spoken languages, particularly regarding their protection or endangerment. Previous studies have not thoroughly examined this relationship in the context of growing digital interaction. Moreover, it is essential to investigate the impact of symbols such as emojis and abbreviations on local or endangered languages, as this is an underexplored area. The long-term effects of this type of language on linguistic and cultural identities in the digital world still require further academic research. Additionally, focusing on digital translation as a tool for either protecting or threatening endangered languages in the context of online interaction remains an underdeveloped aspect in academic literature. Most studies addressing translation in the digital space have focused on global languages, while digital translation for local languages can provide significant solutions to ensure and preserve linguistic diversity. Therefore, despite some existing literature discussing the impact of the internet and technology on language, the relationship between emerging language in the digital space and the protection of endangered languages has yet to be comprehensively and extensively addressed, making it a novel and highly relevant research topic that deserves further academic attention.

1. The Concept of Endangered Languages

UNESCO defines an endangered language as follows: "A language is endangered when it is on a path toward extinc-

tion. Without adequate documentation, a language that is extinct can never be revived. A language is in danger when its speakers cease to use it, use it in an increasingly reduced number of communicative domains, and cease to pass it on from one generation to the next. That is, there are no new speakers, adults or children" (UNESCO, 2003, p. 04).

"A language is clearly endangered when it is at risk of vanishing within a generation or two – that is when its last fluent speakers are elderly, when few or no children are learning it as a first language, and when no one is learning it as a second language. Some experts call a language MORIBUND when it is no longer being learned as a first language: a language that is not being transmitted to younger generations cannot outlive the last generations of native speakers" (Thomason, S., 2015, p. 04).

Thus, a language is considered endangered when the number of its speakers is continuously declining, causing it to gradually lose its status within the community of speakers, which leads to the younger generation ceasing to acquire it as a first language. This phenomenon indicates the loss of the language's communicative and social functions, placing it on a trajectory of gradual linguistic erosion that could ultimately result in its complete extinction.

According to UNESCO's classification (UNESCO, 2003), endangered languages pass through five stages of endangerment, starting from "vulnerable" and ending with "extinct." The degree of endangerment is assessed based on factors such as intergenerational language transmission, the number of speakers, the domains of use, and the availability of written documentation.

Addressing this phenomenon requires interdisciplinary approaches that include documentation, language revitaliza-

tion, and promoting its use in educational and media sectors, framing the modern efforts in the field of safeguarding intangible linguistic heritage.

2. Structural Factors Leading to Language Extinction

According to the "Atlas of Endangered Languages" report published by UNESCO (UNESCO, 2003), statistics indicate that at least 40% of the world's languages are at risk of extinction in the near future. The total number of languages in the world is estimated to be around 7,000, but approximately 2,500 of these are considered endangered. In many of these cases, the number of speakers of these languages is rapidly declining, as many of them are not being learned by younger generations.

Globalization, migration, and educational policies are key factors contributing to the decline of local languages worldwide. Globalization, through media, the internet, and the global economy, leads to the dominance of global languages like English and French in everyday life, thereby marginalizing local languages (Crystal, 2000). Regarding migration, the movement of populations from rural areas to urban centers or from one country to another leads to the adoption of official or dominant languages at the expense of native languages. In terms of educational policies, the focus on teaching official languages such as French or English significantly contributes to the decline of these languages (Bamgbose, 2000; Wright, 2004).

In the context of contemporary studies on endangered languages, the concept of Language Ecology has emerged as a multidimensional theoretical framework linking language with the cultural, social, and biological environment in which it arises and is used. Recent literature emphasizes that language cannot be understood in isolation from the envi-

ronmental and social contexts it is embedded in; rather, it is the result of a complex interaction between diverse factors (Pütz & Filipović, 2016, p. 14). Thus, if this cultural, social, and biological environment—meaning the people and the geographical context in which they interact and practice their cultural and social rituals—disappears, the language they used for communication will inevitably vanish. This argument is supported by field studies, such as those conducted by Gómez (2016) on the interconnected relationship between language, culture, and the natural habitat of communities like the Yanomami speakers in the Brazilian Amazon. This relationship manifests in metaphorical and rhetorical language use, such as metaphors, euphemisms, and circumlocutions, which are understood only within the narrow geographical circle of speakers of that language.

Linguist David Crystal (2000) also affirms that the death of a language is linked to the loss of its ability to perform symbolic and cultural functions and the absence of intergenerational transmission. This absence is primarily attributed to environmental, political, health, and natural changes, or, more directly and swiftly, to educational and communicative systems that impose an alternative dominant language. Recent studies suggest that the main causes of language extinction include institutional marginalization, globalization, urban expansion, migration, and the weakening of traditional community structures (Grenoble & Whaley, 2006; Austin & Sallabank, 2011).

Therefore, these ecological approaches are crucial for understanding the threats faced by languages with limited and confined distribution, especially when they are excluded from their original environments or marginalized. This perspective also helps justify the importance of safeguarding

languages from extinction within a comprehensive framework that not only includes linguistic documentation but extends to the protection of the cultural and social environment that allows the language to persist and thrive.

3. Efforts to Protect Languages from Extinction

Various measures are being adopted by countries and UNESCO to preserve languages from extinction, including linguistic documentation, which aims to preserve linguistic material through the recording of dictionaries, grammar, oral texts, and the cultural contexts associated with the language. Grenoble and Whaley (2006) recommend using multimedia approaches in documentation, which include sound, image, and written text to ensure comprehensiveness. Another method is community participation, which aims to use the language in daily life, cultural production, and ritual practices. The importance of this practice is highlighted in the studies of Hinton and Hale (2001), who assert that language revival goes beyond the educational domain and becomes part of the daily cultural fabric. Additionally, various linguistic planning and policies are adopted by countries, depending on their internal contexts, which include integrating the language into the educational system. UNESCO (2003) has pointed out that teaching in the mother tongue during the early stages of education not only enhances linguistic skills but also contributes to improved academic performance and strengthens cultural identity. Moreover, another method suggested by Austin and Sallabank (2011) is the use of digital applications and platforms to teach and spread the language among younger generations.

Translation serves as a crucial intermediary in the revitalization of endangered languages. It transcends mere linguistic conversion, functioning as a multifaceted cultural process

that aids in the preservation of community cultural memory. This powerful mechanism safeguards endangered languages by documenting them and integrating them into new domains such as education and media, as well as by producing original texts in these languages or translating cultural works from other languages into them. Bassier (2009) posits that translation is instrumental in maintaining linguistic memory, facilitating the transmission of knowledge and cultural traditions linked to native languages to subsequent generations. In this regard, translation allows endangered languages to participate in the 'cognitive production circle' by translating culturally and scientifically significant texts from dominant languages into them. Bassier (2009) further asserts that translation fulfills a dual role: it not only conveys content but also reconstitutes cultural and cognitive frameworks within the local language, thereby enhancing its symbolic legitimacy. Cronin (2003) highlights that translation 're-creates linguistic symbolism' in the target language, altering the community's perception of it and imbuing it with a dynamic cultural role. Additionally, digital translation has emerged as a strategic asset for the promotion of endangered languages, encompassing website localization, audio-visual media translation, and even the application of artificial intelligence.

The COVID-19 pandemic significantly influenced human societies at all levels, particularly in terms of linguistic diversity. It highlighted the vulnerabilities within social systems regarding the preservation of endangered languages, especially in the context of disseminating critical health information. Urbanc (2021) noted that the pandemic exposed linguistic disparities in the delivery of health information to speakers of less prevalent languages, which called for urgent

translation and localization of communications. The global health emergency illustrated that many countries' health systems were ill-equipped to address the needs of linguistically diverse populations. Various initiatives by international bodies, including the World Health Organization and independent entities like Translators Without Borders (TWB) (2020)¹ promoted and supported the translation of medical information into a wide array of less commonly spoken languages. By the end of 2021, preventive measures related to COVID-19 were accessible in approximately 700 languages, with around 630 of these targeting speakers of minority or marginalized languages, a result of collaborative efforts from governments, NGOs, scholars, and local communities². In the digital age, artificial intelligence (AI) and related technologies, such as machine learning (ML), have become essential tools in efforts to preserve endangered languages. AI can assist in building linguistic models for these languages, even with limited textual resources, through techniques like low-resource learning and transfer learning. In this context, Natural Language Processing (NLP) techniques enable the analysis of audio and written texts, extracting syntactic and lexical structures, which enhances documentation and language revival processes. AI can also be used to generate customized educational content or even design conversational applications based on the target language, facilitating language transmission to new generations (Bird, 2020). A prominent example is the Masakhane project, which aims to develop machine translation for African languages using AI with the involvement of local communities. Studies such as Tapo (2023) highlight the significance of such initiatives in

¹ <https://translatorswithoutborders.org/covid-19/>,

² <https://pmc.ncbi.nlm.nih.gov/articles/PMC8722626/>.

empowering communities to control the future of their languages. Companies like Google and Microsoft have also developed AI systems capable of supporting endangered languages by incorporating them into translation platforms, thereby increasing their visibility and use in the digital space (Pérez et al., 2022).

However, is this enough, especially when the UNESCO Atlas (2003) continues to record languages at risk due to a decline in their speakers, particularly in light of the policies adopted by countries to preserve these languages? If we analyze the available data, we find that these efforts remain extremely limited. The preservation of languages in databases, documentation, or their imposition in educational or official institutions does not necessarily guarantee their survival. These languages need to thrive to continue existing, meaning they must interact with their environment and produce knowledge that is passed on naturally across generations. Knowledge transfer is the process through which experiences, values, skills, and information are transmitted from one generation to the next, whether formally (such as through formal education) or informally (such as through oral traditions and customs). Several factors hinder this process, including:

- **Social and Cultural Changes:** Modernization and globalization are reshaping societal values, leading to differing priorities among the new generation compared to previous ones (Inglehart & Baker, 2000).
- **Shifts in Education and Learning Patterns:** Knowledge has become instantly and openly available, changing the role of older generations as the sole reference for knowledge (Siemens, 2005).

- **Disintegration of Traditional Social Ties:** Urbanization and migration have weakened family and community bonds that once facilitated knowledge transmission (Putnam, 2000).
- **Modern Technologies:** The internet and social media have created knowledge and behavioral gaps between generations, potentially hindering or altering traditional ways of transmitting knowledge (Twenge, 2017; Prensky, 2001).

4. The Emergence of Language in the Digital Space: Characteristics, Threats, and Its Implications for Translation and Identity

The digital space, particularly social media platforms, forms a dynamic interactive environment that produces new expressive patterns known as "emergent language." This language or linguistic style is shaped by cultural and technological changes in society, especially within digital or social communication spaces. It may include the use of abbreviations, visual symbols (emojis), loanwords, or the blending of languages, reflecting the linguistic transformations that occur due to interaction between different cultures or digital spaces (Herring & Dresner, 2010; Chavez, 2013; Thurlow & Mroczek, 2011). Gómez (2016) notes that these phenomena represent a shift in communicative structure and may contribute to the fragmentation of the mother tongue, especially among younger generations who acquire their initial linguistic skills within this digital environment. In the face of this change, the mother tongue transforms into a "fragile symbolic code," in which its cognitive and communicative roles diminish, potentially accelerating its decline in the absence of institutional interventions.

On the other hand, this emergent language poses a real challenge to translators, particularly regarding the reproduction of meaning in digital texts characterized by abbreviation, multilingualism, and high symbolism. Translators find themselves dealing with texts that extend beyond verbal dimensions to include cultural, contextual, and visual cues, thereby necessitating an expansion of their competence beyond the linguistic (to include translingual and multimodal literacy), as noted by Cronin (2013). At the cultural level, the emergent language gradually contributes to the reshaping of digital identities (Bala, A. V., 2024), where linguistic affiliations are built according to new criteria that do not necessarily rely on the mother tongue but rather on symbols and network-based affiliations. From this perspective, digital translation becomes a dual tool: it either contributes to the integration of the mother tongue into this space, restoring its legitimacy in digital use, or it reinforces its marginalization by prioritizing languages more "translatable" within global technical frameworks and platforms.

5. Translation as a Tool for Protecting or Marginalizing Endangered Languages

Translation operates within a paradoxical role when it comes to endangered languages. On one hand, translation serves as a protective mechanism, enabling endangered languages to maintain relevance in the digital world. On the other hand, it can inadvertently contribute to the marginalization of these languages, particularly when translation processes are not carefully designed. The duality of translation in this context hinges on its ability to either safeguard linguistic diversity or exacerbate linguistic homogenization:

5.1. Translation as a Tool for Preservation

By translating content into endangered languages, translation ensures their visibility on online platforms, which have become central to global communication. This is particularly important for younger generations, as digital platforms increasingly shape language use and literacy. Translation can provide these young speakers with a familiar, native-language interface, allowing them to engage with content, from social media posts to educational resources, in their own language. This method also contributes to the development of technical terminology in the endangered language, which is vital for its continued use in contemporary discourse.

Moreover, providing interfaces and content in endangered languages not only facilitates communication but also promotes cultural diversity. It challenges the dominance of major languages such as English, fostering a more inclusive digital environment that reflects the linguistic diversity of the world. The expansion of digital content in endangered languages creates opportunities for speakers to use their native languages in various domains, from entertainment to commerce, thus supporting their continued use in everyday contexts.

5.2. Translation as a Source of Marginalization

However, the effectiveness of translation in preserving endangered languages is compromised by the limitations of digital platforms. While platforms like YouTube and Instagram offer automatic translation features, they often only support the most widely spoken languages, leaving less widely spoken and endangered languages on the periphery (Bird, 2020). This imbalance raises a significant concern re-

garding the role of translation in perpetuating linguistic dependency and cultural marginalization.

When translation options are limited, it not only reduces the visibility of endangered languages but also reinforces the dominance of global languages. This can lead to a scenario where speakers of endangered languages find themselves increasingly disconnected from their cultural and linguistic roots. Cultural specificities tied to local expressions and idioms may be overlooked or diluted, replaced by globalized, standardized language that fails to capture the nuances of the original. This process, over time, erodes the richness of the endangered language and weakens the linguistic identity of its speakers.

Furthermore, when translation is primarily mechanical or literal, it can fail to capture the unique syntactic and semantic features of the target language. The loss of these linguistic features can result in a translation that is not truly representative of the culture and worldview embedded in the original language. In this sense, the act of translation, instead of serving as a bridge to preserve cultural identity, may inadvertently contribute to the cultural assimilation of the language into a dominant linguistic framework.

5.3. Cultural and Linguistic Identity Crisis

The risk of cultural and linguistic identity loss becomes particularly pronounced when translation is reduced to a simple linguistic exchange rather than a culturally nuanced process. In such cases, the subtle and deeply ingrained cultural references that are inherent in a language's expressions may be lost in translation. As when translation bypasses these cultural elements, it can lead to a homogenization of cultural identities. The unique linguistic markers that distin-

guish one culture from another are replaced with expressions that fit within a globalized framework, undermining the specificities of the endangered language (Zappavigna, M. 2012).

For example, the use of automatic translation tools in social media platforms may replace local idiomatic expressions with simpler, more universally understood terms, which while functional, lack the emotional or cultural depth of the original. This erasure of cultural nuance results in a shallow form of communication that fails to resonate with native speakers on an emotional level, potentially weakening their connection to their language and culture.

5.4. The Need for Inclusive and Contextual Translation Strategies

To mitigate the risks of linguistic marginalization, it is essential to adopt translation strategies that go beyond simple linguistic transfer. Translation for endangered languages should be context-sensitive and culturally aware (Cronin, 2003). This means that translators must be trained not only in the linguistic aspects of the source and target languages but also in the cultural, social, and historical contexts that shape language use.

For instance, in the case of endangered languages, translation should be seen as part of a larger effort to revitalize the language, incorporating local expressions, metaphors, and idioms that reflect the language's cultural heritage. In addition, platforms should be encouraged to expand their language options and collaborate with linguistic communities to develop more inclusive digital tools. This would ensure that endangered languages are not just preserved in an academic sense but are actively used in digital environments,

empowering speakers to maintain their linguistic heritage in the face of globalization.

6. Social Media: A Threat or an Opportunity? – A Case Study

6.1. On the Official Level:

The digital realm has both positive and negative implications for endangered languages. On one hand, digital platforms such as Facebook, Twitter, and Instagram have become spaces where endangered languages are underrepresented or marginalized. The dominance of global languages like English, Spanish, and Chinese in the digital world presents a barrier for smaller, endangered languages, limiting their visibility and utility. The digital environment is heavily influenced by global communication norms, and when these norms prioritize widely spoken languages, minority languages are often relegated to the periphery, becoming endangered or even extinct.

On the other hand, the digital space can be a powerful tool for the revitalization of endangered languages. The internet, with its far-reaching capabilities, can provide platforms for these languages to thrive in new contexts. The growing presence of digital content in endangered languages enables local communities to reconnect with their linguistic heritage and engage in cross-cultural dialogue. Therefore, the digital space is both a challenge to and an opportunity for the survival of endangered languages, depending on how these languages are utilized in digital content creation and community involvement.

6.1.1. Community Translation Projects: A Model for Language Protection

One of the promising models to counterbalance the threats posed by digital globalization is the community translation project. These initiatives, which are often collaborative efforts by native speakers, aim to create digital content in endangered languages. The primary strength of these projects lies in their community-based nature, allowing for the preservation of linguistic authenticity and the creation of content that reflects the cultural and social realities of the language speakers.

For example, the "Wikipedia in Indigenous Languages" project empowers local communities to create and translate Wikipedia articles in their native languages. This project not only provides a digital repository of knowledge in endangered languages but also contributes to the creation of diverse, community-driven content that reflects indigenous worldviews and knowledge systems. The Wikimedia Indigenous Languages Users Group (WikiNAIL)¹, which supports languages like Navajo, Quechua, and Basque, is an excellent case study of how such community-driven initiatives can bolster the digital presence of endangered languages. By fostering a space for these languages to thrive on platforms with wide visibility, such projects help ensure their ongoing relevance and encourage their continued use by younger generations.

Another example of a successful community-driven project is the "Tusaalanga" platform (Accessible via <https://tusaalanga.ca>), which supports the revitalization of

1

https://meta.wikimedia.org/wiki/Wikimedians_of_North_American_Indigenous_Languages_User_Group?utm_source=chatgpt.com)

the Inuktitut language. The platform allows speakers of Inuktitut to access resources and engage in language learning, helping to bridge the gap between language preservation and technological innovation. Initiatives like these not only help increase the use of endangered languages in digital spaces but also contribute to the development of resources that enable these languages to be used in everyday communication.

6.1.2. Governmental and Corporate Support for Endangered Languages

In addition to grassroots initiatives, governmental bodies and corporate entities have also played a key role in supporting the digital presence of endangered languages. For instance, the First Peoples' Cultural Council (FPCC) in British Columbia supports Indigenous communities through its digital resources, including an active Facebook page¹ that provides educational materials and updates on language revitalization efforts. This initiative strengthens communication within Indigenous communities and fosters a sense of pride and unity among speakers of endangered languages.

Similarly, the Indian government's MyGov India initiative² leverages social media to highlight the linguistic diversity of the country. Through platforms like Instagram³, the initiative promotes India's 22 official languages and numerous local dialects, showcasing the rich cultural and linguistic heritage of the nation. The inclusion of such initiatives

¹ <https://www.facebook.com/firstpeoplesculturalcouncil>)

²

<https://www.instagram.com/vicepresidentofindia/reel/DHILbvOsG8x/>

³ <https://www.instagram.com/reel/DIzj1ehA6V9/>)

demonstrates the potential for governmental and corporate efforts to create spaces where endangered languages can be celebrated and preserved digitally.

On the corporate front, Google's recent announcement to include 110 new languages, including several African languages like Tifinagh and Wolof, in its machine translation services is a step forward in bridging the digital divide. By incorporating these languages into mainstream digital platforms, Google helps create a more inclusive digital environment, ensuring that these languages are not left behind in an increasingly globalized world.

6.1.3. Challenges Posed by Limited Usage and Hybridization of Language

Despite the growing efforts to integrate endangered languages into the digital space, several challenges remain. One of the most significant issues is the symbolic usage of local languages in specific, often ceremonial, contexts—such as holidays or cultural events. While these uses are important for raising awareness of the language and its cultural significance, they do not contribute to the everyday use of the language in digital life. For endangered languages to thrive, they must be embedded in daily communication practices, which requires a shift from symbolic to functional use in the digital space. Simply celebrating the language during cultural events is insufficient for its long-term survival.

The emergence of hybrid linguistic phenomena is another concern. As individuals increasingly use global languages like English, French, and Spanish in their daily lives, there is a tendency for these languages to intermingle with local languages. This hybridization often leads to the weakening of the original linguistic identity, as the use of foreign terms becomes more frequent in everyday speech. The widespread

adoption of foreign expressions can erode the structural integrity of endangered languages, leading to a loss of linguistic purity and, over time, to the erosion of essential cultural and linguistic features. This phenomenon is exacerbated by the pervasive influence of social media, where English and other global languages dominate discussions, further reinforcing the marginalization of local languages.

6.1.4. The Digital Divide: Lack of Translation Tools for Endangered Languages

The lack of machine translation tools dedicated to endangered languages remains a critical issue. Many endangered languages do not have adequate machine translation services, limiting their users' access to the wealth of global information available online. Without proper translation tools, speakers of endangered languages are excluded from fully participating in the global digital ecosystem. This digital gap reinforces the linguistic marginalization of these communities, as they are unable to access critical digital resources, such as news, educational materials, and entertainment, in their native languages.

The absence of machine translation infrastructure also limits the development of language technologies that could promote the use of endangered languages in the digital space. As a result, speakers of endangered languages are often forced to rely on global languages for communication, further diminishing the presence of their native tongues in digital environments.

Although the digital realm poses considerable obstacles to the preservation and revitalization of endangered languages, it simultaneously provides remarkable opportunities for these languages to flourish in novel environments. Initia-

tives such as community translation projects, governmental backing, and corporate efforts are essential for securing a digital presence for endangered languages. Nevertheless, the symbolic employment of these languages in particular contexts, along with the emergence of hybrid linguistic practices, presents threats to their long-term viability. To tackle these issues, it is imperative to establish sustainable frameworks that incorporate endangered languages into everyday digital interactions and offer the requisite technological infrastructure to facilitate their usage. This approach can cultivate an inclusive digital landscape that honors linguistic diversity and guarantees the survival of endangered languages in the contemporary digital age.

6.2. On the day-to-day life:

While safeguarding collective memory is a vital aspect of language preservation, a deeper and more nuanced analysis requires looking beyond the official and formal interventions of experts. As noted, before, we must examine the broader, more subtle linguistic phenomena that may not be directly visible to specialists. These include the everyday use of language in digital spaces, which involves not only institutional efforts but also grassroots interactions among speakers, especially those within younger, more digitally connected populations. This distinction is crucial in understanding how endangered languages evolve and how their digital representation may influence their future.

6.2.1. The Impact of User-Generated Content on Language Use

A particularly noteworthy aspect is the evolving function of translation in environments dominated by user-generated content, such as comment sections and informal digital plat-

forms. In these scenarios, translation tends to be decentralized, with contributions from individuals across diverse cultural and linguistic backgrounds. This democratization of translation presents opportunities for linguistic expression; however, it also results in a considerable linguistic divide. A significant number of those involved in translation and content creation are young individuals who may lack a profound connection to the endangered languages being discussed, focusing instead on articulating their views on subjects such as celebrities, television programs, and global trends.

This creates a linguistic tension, as users seek to assert their presence, engage with global issues, or demonstrate loyalty to specific cultural phenomena. As a result, translation becomes a tool for negotiation of identity and affiliation. On one hand, it facilitates the spread of information and participation in global dialogues, but on the other hand, it can undermine the integrity of local languages, particularly when those languages are used in a fragmented, hybridized manner. This tension between the global and the local is a key issue in the digital landscape and poses a risk to endangered languages, as users may prioritize global languages or use hybrid forms of communication that dilute linguistic purity.

6.2.2. Technical Challenges Faced by Endangered Languages in the Digital Space

At the technical level, the limitations of modern devices and platforms are a significant obstacle for endangered languages. These devices typically offer limited language options, which are skewed toward the most widely spoken languages. We can highlight two main technical challenges:

the lack of standardization (such as Unicode support for many endangered languages) (Oberhaus, D. 2023) and the scarcity of linguistic resources for training machine translation models.

The lack of standardized systems in Unicode prevents many endangered languages from being represented digitally. Unicode, the global standard for text encoding, is essential for enabling consistent representation of languages across different devices and platforms. Without a standardized character set, it becomes difficult to input, store, and display endangered languages on modern devices, further limiting their digital presence.

Additionally, the scarcity of linguistic data for training machine translation models is another significant challenge. Machine learning and artificial intelligence tools, which have the potential to aid in language revitalization, rely heavily on large datasets to improve their accuracy. For endangered languages, which often lack substantial digital resources, these tools cannot function optimally, hindering the development of technologies that could support these languages in digital spaces. The result is that endangered languages are excluded from the very technological innovations that could promote their use and survival.

6.2.3. Linguistic Innovations in Digital Spaces: New Practices and Globalization Pressures

It is essential to examine the rise of new linguistic practices within digital environments, especially on social media platforms. A sociolinguistic analysis of these practices uncovers two significant trends: the utilization of acronyms such as 'LOL' and 'OMG' to enable rapid communication, and the incorporation of emojis as a means of conveying emotions. These practices signify broader societal transfor-

mations, including the swift pace of digital interactions and the lack of conventional communicative signals (such as facial expressions and vocal tone) in written exchanges. These phenomena align with what Danesi (2016) describes as a 'quasi-linguistic shift,' wherein symbols like emojis assume roles typically associated with spoken language.

Moreover, the integration of foreign languages in comments and posts reflects multiple socio-cultural phenomena, such as the desire to connect with a global community or respond to cultural hegemony. The phenomenon of hybrid multilingualism, where speakers mix languages in their communication, reflects these pressures and desires for social distinction and belonging in a globalized world. However, this hybrid communication also creates challenges for endangered languages, as speakers, particularly younger ones, may adopt expressions from dominant languages and reduce their use of native linguistic forms.

6.2.4. The Risk of Language Erosion and the Marginalization of Endangered Languages

While these new linguistic practices contribute to the dynamism and creativity of digital communication, they also pose risks for endangered languages. As younger generations increasingly adopt hybrid expressions or use global languages in their online interactions, there is a significant risk of marginalizing their native tongues. This linguistic shift, particularly in digital environments, can lead to the erosion of traditional language structures and a weakened command of the mother tongue. As Gómez (2016) notes, such changes may impact the language's vitality, with the younger generation potentially losing their ability to speak the language fluently.

From a critical sociolinguistic perspective, these phenomena also reflect broader power dynamics in global communication. The dominance of certain languages (such as English) in digital spaces reinforces cultural and linguistic hierarchies, marginalizing languages that are already endangered. The widespread use of global languages and symbols in digital communication further entrenches these power imbalances, creating a vicious cycle where speakers of endangered languages are pressured to conform to global norms, rather than maintaining their linguistic and cultural heritage.

The challenges faced by endangered languages in digital spaces are multifaceted, involving both technical barriers and linguistic shifts. While efforts by governments and specialized bodies to preserve these languages are crucial, they must be complemented by broader strategies that address the digital realities of language use. The technical challenges related to Unicode standardization and the lack of resources for machine translation must be overcome to ensure that endangered languages can thrive in the digital age. Moreover, as digital spaces continue to shape language practices, it is essential to be mindful of the hybridization of language and the potential marginalization of native tongues. Through inclusive and contextually aware strategies, endangered languages can find a place in the digital world, ensuring their continued relevance and survival.

7. Challenges of Translating Digital Content in the Context of New Language: A Socio-Linguistic and Semantic Analysis

Translation in the digital age has faced unprecedented challenges, especially with the emergence of the "new language" that combines abbreviations, emoticons, and linguistics.

tic blending between colloquials and foreign languages. The main issues can be summarized as follows:

1. **Loss of Expressive Rhythm and Emotional Charge** Oral expressions and digital abbreviations such as "OMG" and "LOL" carry emotional and contextual charges that are difficult to convey through traditional text-based translation, leading to the erosion of the emotional impact of the translated text. House (2015) suggests that the loss of these emotional dimensions reflects the failure of translation to achieve pragmatic communicative equivalence.
2. **Absence of Visual Symbolic Equivalence** Emoticons (emojis) are an integral part of meaning-making in digital messages. However, most traditional translation processes overlook these symbols or translate them in ways that strip them of their interactive function. Zappavigna (2012) discussed the importance of the social and visual meanings conveyed by symbols in online discourse, asserting that dealing with them requires a multimodal approach.
3. **Neutralizing Digital Identity** Hybrid digital language contributes to the construction of a "networked identity" for users. When translating into an endangered native language, this identity is often neutralized in favor of rigid linguistic standards. Tagg (2015) demonstrated that linguistic mixing and the use of symbols represent an essential part of social identity in digital spaces.
4. **Difficulty in Conveying Hybrid Linguistic Structures** The blending of different languages within a single phrase (e.g., "I'm so tired اليوم") creates difficulty for translations that assume a clear separation of lan-

guages. Canagarajah (2013) argues that transcending the rigid boundaries of languages (translingual practices) should be an integral part of any modern translation strategies.

Practical Examples:

- On the "Native American Language Net" Facebook page, we encounter mixed comments like: "*Loving the powwow vibes today* 🔥 #TraditionsStrong" This blends English with native cultural terms, accompanied by an emoticon for emotional emphasis.
- On Instagram accounts in Cornish (Cornish language): "*Gool Peran Lowen everyone* 🌟 Stay #KernowProud!" Here, there is a blend of the native language with modern English and emoticons.

The translation of digital content in the contemporary landscape of emerging languages encounters considerable obstacles stemming from the dynamic evolution of communication within online environments. The diminishment of emotional impact, the lack of visual symbolic parity, the standardization of digital identities, and the challenges posed by hybrid linguistic frameworks highlight the limitations of conventional translation techniques in tackling the intricacies of present-day digital dialogue. To accurately convey the subtleties of this new linguistic paradigm, translation methodologies must evolve by incorporating multimodal and translingual strategies, thereby safeguarding both the social and emotional aspects of digital interactions across different languages.

Conclusion:

The new language phenomenon in the digital space represents a complex linguistic development that illustrates the interaction between modern technologies and socio-cultural transformations. This type of language, which includes abbreviations, visual symbols (emojis), and the blending of languages, creates a communicative environment characterized by speed and flexibility, allowing individuals to express their thoughts and emotions through hybrid linguistic tools and unconventional communication. Although this phenomenon contributes to facilitating immediate communication and improving interaction between individuals in the digital space, it carries linguistic and cultural challenges that may significantly impact the native language and weaken the expressive capacity of traditional languages.

From what has been discussed in this paper, it is evident that the new language is not merely a tool for simplifying expression or achieving rapid interaction, but rather a linguistic and cultural shift that reflects the effects of globalization and technology on linguistic identity. In the context of the dominance of languages such as English in the digital space, these phenomena may contribute to the weakening and marginalization of endangered languages, especially if current trends continue to rely on symbols and abbreviations that fail to reflect the complexity of traditional language and do not cover all aspects of meaning.

Despite these risks, translation can be a vital and essential tool for protecting linguistic diversity, provided it is employed strategically and consciously. Translation can contribute to transferring digital content into endangered languages, thus giving them an opportunity to survive and

evolve in digital contexts. However, the effectiveness of translation in this context depends on the strategies employed, such as adaptive translation that takes into account cultural and linguistic contexts and avoids reproducing the standards of the dominant language. Furthermore, supporting the digital infrastructure for endangered languages is crucial, such as providing technological tools that support machine translation and interfaces in local languages, which will help encourage the digital representation of these languages.

In this context, the role of translators and specialists in translation and language teaching is of paramount importance, as it requires advanced academic training that enables them to understand the challenges and opportunities that arise for languages in the digital age. In this framework, innovative educational strategies should be developed, focusing on the interaction between translation and endangered languages, thus enhancing the capacity to preserve linguistic diversity and cultural interaction.

The phenomenon of the new language in the digital space requires further research, especially regarding its impact on local languages and cultural identities in the digital world. This research should include studying the reciprocal effects between technology and language in various contexts, analyzing how translation and digital technologies can be leveraged to develop effective protection mechanisms for endangered languages, ensuring the sustainability and preservation of linguistic diversity in the future.

Based on the foregoing, the challenges posed by the new language in the digital space require a conscious academic response, encompassing both theoretical foundations and practical applications that contribute to the preservation of

linguistic diversity, while ensuring that language integrates with digital technologies without weakening or replacing it.

This study may be limited in its scope and applications, but we must acknowledge the question: Can we truly overcome the law of natural selection, where the strongest survive, and ensure the continuity of languages spoken by only a few thousand people, regardless of their cultural, social, religious, and civilizational traditions? Meanwhile, languages and civilizations of powerful and influential peoples have faded, and their languages either disappeared or remain trapped in historical and archaeological studies after their extinction. Despite the efforts that have been made and are still being made to revive them, only fragments of their memory have been preserved. Therefore, we must recognize that a language remains alive as long as its speakers are alive, eager to revive it and allow it to interact with others. Once they disappear or abandon it for one reason or another, its fate is extinction, transforming into merely a tangible or intangible heritage stored in databases.

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Repenser la centralité et la périphérie dans les pratiques pédagogiques hybrides en FLE à l'épreuve des TIC : perception des enseignants dans les universités algériennes

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Résumé :

Le présent article se focalise sur les dynamiques de centralité et de périphérie dans l'enseignement hybride, reconfiguré par les technologies de l'information et de la communication (TIC). On interroge la perception des enseignants universitaires algériens en matière de leurs pratiques pédagogiques dans la période post-pandémie de la COVID 19. Cette étude exploratoire se veut théorico-empirique dans la mesure où elle s'appuie sur une revue de littérature et une enquête par questionnaire menée auprès d'une panoplie d'enseignants qui forme notre échantillon. A travers une analyse descriptive des données recueillies, nous établissons un lien de causalité entre les pratiques pédagogiques adoptées par les enseignants et les exigences techno-pédagogiques alimentées par l'intégration des TIC dans les espaces éducatifs. Notre contribution se propose de repenser le rapport d'opposition et de dualité en termes de centre et de périphérie où l'articulation entre le distanciel et le présentiel est de mise dans l'enseignement hybride qui se caractérise par une mutation paradigmatique innovante.

Mots-clés : enseignement hybride, TIC, centralité pédagogique, marginalisation, innovation technopédagogique

Rethinking center and periphery in hybrid FFL (fresh as a foreign language) teaching practices in the face of ICT: teachers' perceptions in Algerian Universities

Abstract:

The present article focus on the dynamics of centrality and periphery in the context of hybrid teaching, reconfigured by information and communication technologies (ICT). It examines the perceptions of Algerian university teachers regarding their pedagogical practices in the post-pandemic period of COVID-19. This exploratory study both theoretical and empirical, is based on a literature review and a questionnaire survey conducted among a diverse sample of our teachers. Through descriptive analysis of the collected data , we have drawn a relation of causality between pedagogical practices adopted by teachers and the techno-pedagogical requirements driven by the integration of ICT in the education spaces. Our contrubition aimed at rethinking the opposition and duality relation in terms of cener and periphery where the relationship between "face-to-face" and "the remote" is considered in hybrid teaching which is characterized by an innovative paradigmatic shift.

Keywords: *hybrid teaching, ICT, pedagogical centrality, marginalization, techno-pedagogical innovation*

Introduction

Cet article étant une réflexion axée fondamentalement sur centre (s) et périphérie(s) s'inscrit dans une lignée d'œuvres scientifiques multidisciplinaires. Bien que cette entité reconnaisse une floraison dans les sciences dures, elle fait l'objet d'une littérature rarissime en didactique des langues étrangères et plus particulièrement celle du FLE. Dès lors, le couple conceptuel « centre/périphérie » a vu le jour dans les années 60 sous la plume de Werner Sombart dans des disciplines autres que les sciences de l'éducation. Il se focalisait essentiellement sur le principe de la domination dans les rapports adversaires mais également le renversement possible du phénomène en question. De ce fait, les relations entre lesdits « centres et périphéries » loin d'être figées. Elles se caractérisent par une dynamique de réversibilité : les périphéries peuvent influencer les centres et vice-versa.

Toujours est-il, les notions de centre et de périphérie s'avèrent délicates à cerner mais elles représentent un champ fertile susceptible d'être exploré notamment dans le domaine de la didactique des langues étrangères. De telle dynamique découle notre curiosité scientifique s'inscrivant principalement dans le paradigme du comblement de lacune constatée en examinant une revue de littérature ad hoc jugée pauvre.

Dans cette perspective, le substrat binaire centre/périphérie ne possède pas jusqu'alors un statut bien précis ni une filiation claire, ce qui suscite des acceptions équivoques donnant lieu à des réflexions disparates : rapport de complémentarité, de dualité, d'opposition, voire de superposition.

En didactique des langues dont il s'agit, les méthodologies d'enseignement ont reconfiguré la centralisation pédagogique en mettant l'accent non sur la méthode et/ou sur l'enseignant, mais plutôt sur l'apprenant qui doit être au centre du processus éducatif et jouissant d'un engagement actif (Philippe Meirieu, 1987, Jean Pierre Astolfi. 1991, Jean Houssaye. 1988). Il ne serait donc pas anodin de questionner les pratiques pédagogiques en vue d'avoir un retour d'expérience et repositionner la périphérie et le centre ou inversement. Il s'agira de repenser la place qu'occupe chacun des trois pôles qui constituent le triangle didactique à savoir l'enseignant, l'apprenant, le savoir au prisme des TIC (technologies de l'information et de la communication).

Etant en mouvance et dynamique permanentes, les méthodologies et approches didactiques sont en phase avec l'avancée technologique. De par leur profusion tous azimuts, les TIC tendent à chambouler les pratiques pédagogiques en exerçant une influence grandissante sur les activités de base de l'enseignement supérieur en particulier. Du fait que les TIC assoient leur hégémonie, l'intégration du numérique dans l'éducation est devenue désormais condition sine qua non, et à ce moment-là la pédagogie universitaire s'apprête à revêtir un caractère innovant connu communément sous le vocable d'« innovation techno-pédagogique » Jean Claude Richez, Pierre Lévy, Gille Dowek (2020). Eu égard à la pandémie de COVID19, les pratiques pédagogiques subissent d'importantes régulations donnant lieu à la mise en œuvre de certaines approches qui répondent aux contraintes survenues. En effet, l'enseignement en mode présentiel est devenu d'ores et déjà handicapant en raison du confinement sanitaire imposé. Telle situation a conduit la communauté enseignante à mettre en marge certaines pratiques pédagogiques et centrer la formation sur d'autres pratiques. De ce fait, la

formation à distance devient, auquel cas, non seulement une nécessité incontournable mais aussi une alternative susceptible de maintenir la relation entre les principaux acteurs du processus d'enseignement-apprentissage (enseignants/apprenants) en termes de transmission des savoirs, Sakrane,F.-Z & Legros,D, (2021).

A cet égard, nous sommes soucieux d'amorcer une étude exploratoire des pratiques pédagogiques des enseignants universitaires pour la période de post-covid où la formation à distance n'est plus seulement obligatoire mais elle représente un défi majeur d'innovation pédagogique face à la massification accrue enregistrée au niveau des établissements universitaires dans le pays.

Entre le mode en présentiel et le mode en distanciel, il est donc opportun de s'interroger sur la centralité et la périphérie qu'accordent les enseignants universitaires à l'un des deux modes. De ces propos jaillit notre question de recherche : quelle est la perception des enseignants de FLE à l'université algérienne en termes du rôle central ou périphérique dans une formation hybride utilisant les TIC/E ? Comment cette perception influence-t-elle l'efficacité et la mise en œuvre des méthodes pédagogiques hybrides par rapport à l'enseignement en présentiel ?

Pour promouvoir cette complémentarité, il est important d'intégrer des stratégies de guidage permettant la navigation entre le centre et la périphérie de manière efficiente, Cuq & Gruca., (2017). Cela inclut la formation des enseignants à l'usage des outils numériques, ainsi que la conception de parcours d'apprentissage hybride qui valorisent à la fois les compétences formelles et informelles.

Cette étude a pour ambition d'explorer, primo, la position des enseignants vis-à-vis des pratiques pédagogique hy-

brides en utilisant les TIC/E. Secundo, expliciter la part de l'efficacité des pédagogies innovantes sur les pratiques enseignantes existantes. Tertio, repenser les mutations possibles entre le centre et la périphérie dans une reconfiguration techno-pédagogique. Tels objectifs dépendent directement des hypothèses que nous émettons comme suit : Le potentiel de dispositif hybride permettrait aux enseignants de promouvoir des compétences en technologie et de varier les pratiques pédagogiques. La centration qui a été majoritairement sur l'apprenant avant le COVID 19, elle serait sur les TIC/E dans le statu quo, c'est-à-dire dans la période post-pandémique.

1. Le modèle TPACK pour mesurer la perception des enseignants

De même, pour examiner la perception des enseignants vis-à-vis de l'enseignement numérique à l'épreuve des TIC, le recours au modèle TPACK (Technological Pedagogical Content Knowledge) est envisageable (Mishra et Koehler, 2006) dans la mesure où ce modèle met en avant l'importance d'intégrer en corrélation les connaissances technologiques, pédagogiques et disciplinaires pour utiliser à bon escient des TIC. Ce modèle repose fondamentalement sur trois formes de connaissances distinctes :

1.1 Content Knowledge (CK) : ce volet se focalise sur la maîtrise des savoirs disciplinaires que l'enseignant est censé transmettre (par exemple, les mathématiques, les sciences, la littérature). Cette connaissance englobe l'ensemble des concepts, des théories, des méthodes et des pratiques propres à la discipline envisagée.

1.2 Pedagogical Knowledge (PK) : Cette composante concerne les méthodes et les stratégies d'enseignement, indépendamment du contenu spécifique. Elle inclut la gestion de

classe, les techniques d'évaluation, la motivation des élèves et la planification des leçons.

1.3 Technological Knowledge (TK) : Cette connaissance se réfère à la maîtrise des outils technologiques, qu'ils soient numériques (ordinateurs, logiciels, applications) ou non numériques (tableaux, projecteurs). Elle inclut également la capacité à comprendre comment les technologies évoluent et comment les utiliser de manière créative.

Ainsi, la troisième composante conduit-nous à nous pencher sur l'identification de la littératie numérique chez les enseignants (Eshet-Alkatali, 2004) pour faire en sorte de mesurer et évaluer les compétences requises dans un environnement numérique.

Un autre éventail digne d'être évoqué dans ce créneau, il s'agit des opportunités que peuvent offrir les TIC pour la formation continue des enseignants, surtout par le biais des MOOC (Massive Open Online Course) et les communautés de pratique en ligne (Touron et al., 2018). Ces outils constituent des palettes sur lesquelles s'appuient les enseignants pour s'auto-former de manière flexible et autonome en partageant ainsi des lots d'expériences avec des pairs.

2. Méthodologie

Mener un travail de recherche qui porte sur la perception des enseignants du FLE dans le contexte universitaire algérien vis-à-vis de leur rôle central ou périphérique en matière d'enseignement hybride incluant les TIC/E nous amène à opter pour une approche inductive. Celle-ci nous permet de recueillir les données par l'entremise d'une enquête par questionnaire adressé à un panel d'enseignants en constituant ainsi l'échantillon. Celui-ci est représenté par 34 enseignants affiliés à des établissements universitaires divers,

répartis sur les quatre coins du pays : université de Béjaia, Blida, Ghardaia, El-oued, Oum El Bouaghi, Chlef, Adrar, ENS de Ouargla, entre autres.

Puisque le questionnaire se concentre majoritairement sur les perceptions des participants, la démarche qualitative s'avère adéquate à l'analyse des données recueillies. La démarche quantitative est également envisageable car on a affaire à des données chiffrées et à des contrastes des proportions susceptibles d'être quantifiés. D'où la mixité de démarches : qualitative/quantitative.

Il convient de préciser que le présent travail se met au diapason de recherche-description dans la mesure où on est censé dépiauter en amont l'état des lieux des pratiques pédagogiques des enquêtés à l'ère du numérique qui seront soumises à une analyse méticuleuse, et en aval on se penchera sur une synthèse inductive des résultats obtenus.

3. Cueillette des résultats

Dans le cadre du présent travail, nous prétendons évaluer les pratiques pédagogiques des enseignants universitaires du FLE en matière de mode présentiel dit aussi « en face à face » et celui en distanciel.

Force est d'identifier leurs perceptions quant à la centralité et la périphérie de l'un ou de l'autre mode. Notre étude s'ancre dans l'axe synchronique. En effet, elle se définit dans un intervalle de temps bien déterminé ; il s'agit bel et bien de la période post-pandémique du Covid 19. Pour ce faire, un questionnaire a été élaboré et mis en ligne via (Google Forms) à l'attention d'une cinquantaine d'enseignants lors de l'entame du premier semestre au titre de la saison académique en cours (2024/2025) mais, on en a reçu que 34. Voilà l'échantillon soumis à l'analyse.

Le questionnaire se scinde en 4 sections :

- Prise de renseignements sur les enseignants enquêtés (âge, sexe, expérience professionnelle et grade)
- Données sur l'existant en matière d'hybridation : dresser un état des lieux : cette section comprend 10 items variés entre questions ouvertes et questions fermées.
- Compétences et capacités des enseignants en TIC/E : celle-ci comporte 6 questions qui portent essentiellement sur le profil des enseignants en technologie éducative et l'usage des TIC/E en cours de FLE.
- Représentations de l'enseignement hybride : centralité/périphérie.

Il est important de souligner que les 4 sections proposées sont imbriquées. Toutefois, dans la présente étude ; nous nous focalisons particulièrement sur la dernière qui entretient un rapport intimement étroit avec l'objectif de notre réflexion.

4. Analyse des résultats

4.1 Informations sociodémographiques

Les répondants à ce questionnaire constituent un public hétérogène sur différents plans : grade, sexe, décalage d'âge et situation géographique des établissements d'attache. En matière du sexe, il est à signaler qu'on a reçu par sérendipité un quotient paritaire entre la gent féminine et la gent masculine.

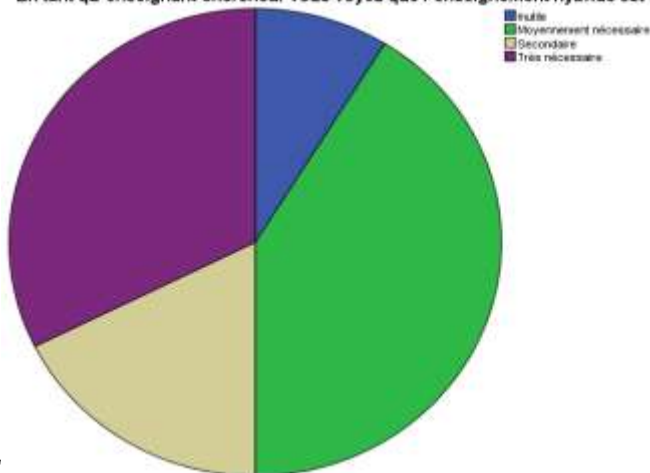
Parmi d'autres, on a des enseignants de grade MCB, MCA, Professeurs, mais aussi des doctorants contractuels.

4.2 Perception portée sur l'enseignement hybride

Si on s'attache au jugement qu'ils portent sur l'enseignement hybride, on estime que 67,6 % des répondants qualifient ce mode de nécessaire, voire de très néces-

saire, tandis qu'une minorité flagrante le considère comme inutile et secondaire, ce résultat représente respectivement 8,8% et 17,6%.

En tant qu'enseignant-chercheur vous voyez que l'enseignement hybride est :



C

Figure 1 : Degré d'utilité de l'enseignement hybride

4.3 Intérêt de l'enseignement hybride dans les instituts académiques

Quant à l'intérêt accordé à l'enseignement hybride dans les institutions universitaires, on constate un écart significatif entre les répondants : 64,7 % des enseignants questionnés soulignent la marginalité d'intérêt assignée à l'enseignement hybride. En contrepoint, 32,4 % affirment la centralité du mode en question et un taux minime, soit 2,9 % déclarent que l'enseignement hybride n'est doté d'aucun intérêt.



Figure 2 : Enseignement hybride entre centre et périphérie dans le cadre institutionnel

4.4 Etat des lieux de l’enseignement à distance au supérieur : de la formation des enseignants à l’usage effectif des TIC/E

Ce volet nous conduit à analyser les causes de ces déclarations à propos de l’organisation des sessions de formation sur l’usage des TIC/E au profit des enseignants : les réponses s’avèrent légitimes de telle sorte que certaines universités n’organisent qu’une session par an et ceci représente la quasi-totalité des réponses fournies, soit 41,2 % et que 38,2 % déclarent l’absentéisme des sessions de formation en TICE au niveau des institutions auxquels ils s’attachent. Mais la mise en place des sessions de formation sur le plan hebdomadaire/mensuel, trimestriel ou même semestriel affiche un taux assez faible : soit respectivement 5,9 %, 8,8%, 5,9%.

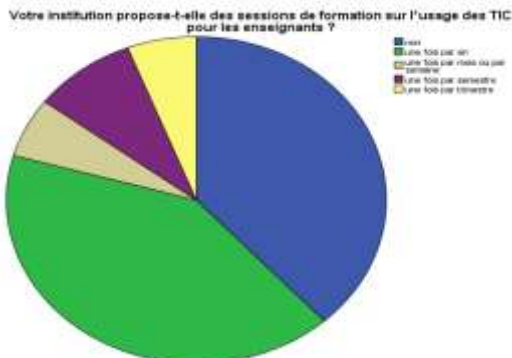


Figure 3 : Périodique de formation en TIC au profit des enseignants

De surcroît, en ce qui concerne la proposition d'enseignement en présentiel et celui à distance, le diagramme fait ressortir que l'enseignement hybride prime sur l'enseignement entièrement à distance mais également sur celui en présentiel, d'autant plus dans la période post pandémique. De ce fait, 50% des enseignants sont en faveur de la formation hybride, alors que 23,5% seulement d'entre eux soutiennent la formation entièrement en ligne

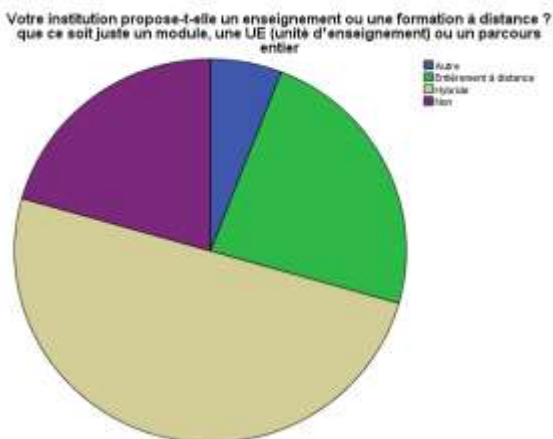


Figure 4 : Modalité de formation à distance proposée

Si on s'attache au niveau des enseignants en matière des TIC/E, on constate qu'un nombre important a bénéficié d'une formation au cours de service, soit 58,8 %, c'est le taux d'enseignants bénéficiaires de la formation en question. Or, 41,2% des enquêtés déclarent en avoir dépourvu, cela sous-entend que l'université algérienne s'intéresse à la formation du personnel enseignant.

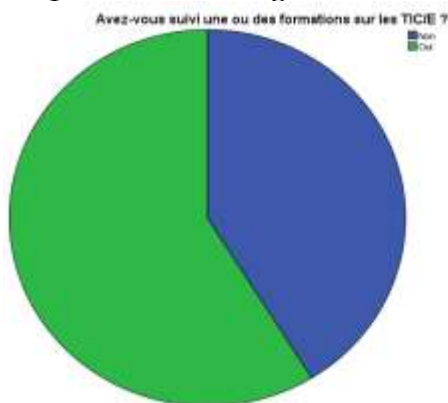


Figure 5 : Bénéfice de formation sur les TIC/E

D'un autre côté, l'usage de la plateforme Moodle au niveau de l'université algérienne constitue une panacée. Il s'agit d'une palette qui supporte des contenus pédagogiques à communiquer avec les étudiants mais aussi une passerelle reliant les acteurs principaux du processus d'enseignement/apprentissage. Le graphique ci-joint indique que la plupart des enseignants ont eu l'occasion d'utiliser cet artefact qui représentait la clé de voûte durant la période pandémique dont l'usage perdure jusqu'à nos jours.

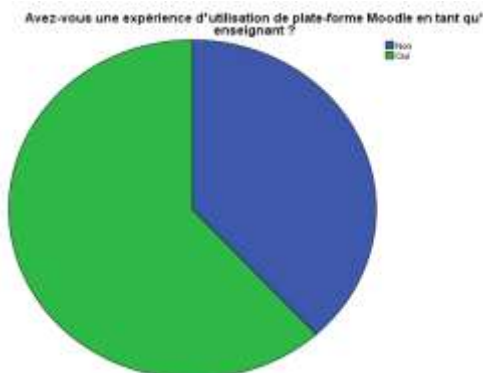


Figure 6 : Usage de la plateforme Moodle

Un autre éventail digne d'être décrit ici, il s'agit de l'estimation des enseignants de leurs compétences en technologie éducative. La représentation graphique indique un décalage frappant en la matière. Soit 47,1 % des répondants disposent d'un niveau passable, alors qu'un nombre réduit déclare avoir un niveau excellent, 1 seul répondant sur 34, tandis qu'un taux restreint d'enseignants déclarent avoir un bon niveau, soit 17,6 %. Or, un nombre considérable avoue que leur niveau est jugé subalterne, il est déterminé de 11 enseignants parmi le nombre total des enquêtés.

Comment estimez-vous vos compétences dans les domaines suivants : plateformes FOAD, mobile learning, licences libres, Open Acces, scénarisation pédagogique ?

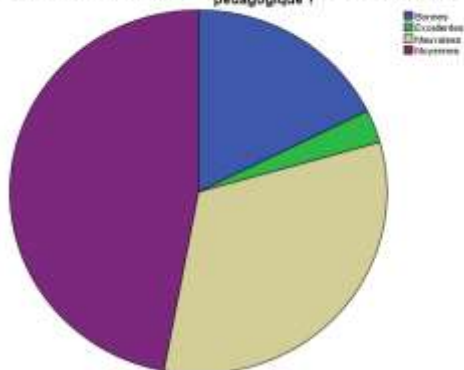


Figure 7 : Niveau de maitrise de la technologie éducative

On se penche à présent sur l'implémentation des cours sur supports numériques, à ce sujet la plupart des enseignants questionnés fournissent une réponse favorable à cet acte : 76,5% répondent par oui, le reste des enseignants n'ont pas eu l'occasion d'accomplir cette tâche ; soit 23,5 % seulement.

Force est de s'interroger sur l'adoption du mode approprié en enseignement hybride. Dans cette perspective, on constate la primauté du mode asynchrone sur le mode synchrone. Soit 61,8 % optent pour l'asynchrone et 38,2 % sont favorables au mode dit synchrone.

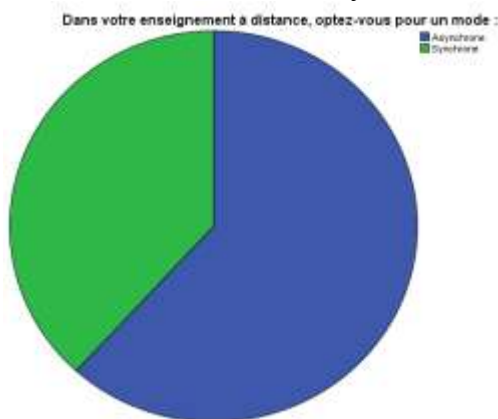


Figure 8 : Usage du mode synchrone vs asynchrone

Pour ce qui est de l'enseignement hybride et son rapport à l'autonomie, on voit que l'enseignement hybride impacte positivement le processus d'enseignement/apprentissage. En effet, il permet d'initier les étudiants à être autonomes. D'après le graphique ci-joint, soit 70,6 % répondent par oui, et seulement 29,4 % jugent qu'il présente un handicap.

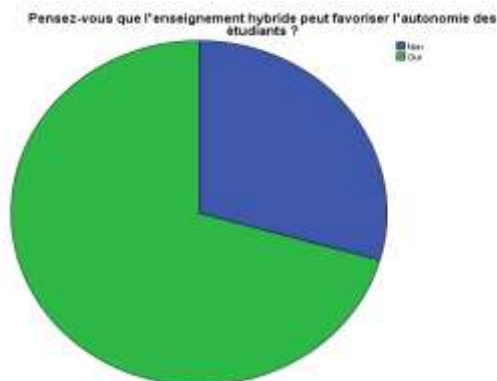


Figure 9 : Effet de l'enseignement hybride sur l'autonomie

Du point de vue de l'efficacité et de la complexité, l'enseignement à distance semble plus difficile que l'enseignement en présentiel comme l'indique le graphique apposé. Soit 82,4% des enseignants témoignent d'un dysfonctionnement de l'enseignement en mode distanciel.

Quant à la quantité des savoirs dispensés aux étudiants par le biais de l'un des deux modes, il est évident que les savoirs peuvent être dispensés en bonne quantité si on travaille en présentiel, c'est le cas de 19 répondants sur 34 qui le confirment. Par opposition à l'enseignement en distanciel, soit 8 répondants sur 34. Et les 7 répondants qui restent soulignent qu'il y a un équilibre entre le volume de travail en présentiel et en distanciel.

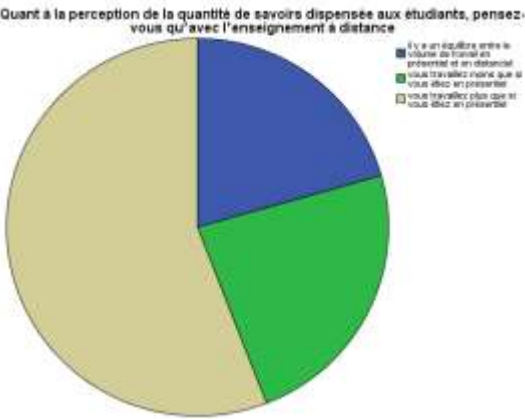


Figure 10 : Qualité de l’enseignement dispensé à distance

A propos de l’interaction enseignants/étudiants, on constate qu’elle est moins active en distanciel par opposition à celle assurée en présentiel.

En outre, le choix de type d’enseignement fait la symétrie de positions entre l’enseignement hybride et l’enseignement présentiel: soit 47 % préfèrent l’enseignement hybride et, 47 % préfèrent l’enseignement en présentiel . Si on se penche sur l’environnement numérique de travail existant (ENT), on constate que la majorité des établissements universitaires sont munies au moins de salles multimédias, soit 39,1 %.

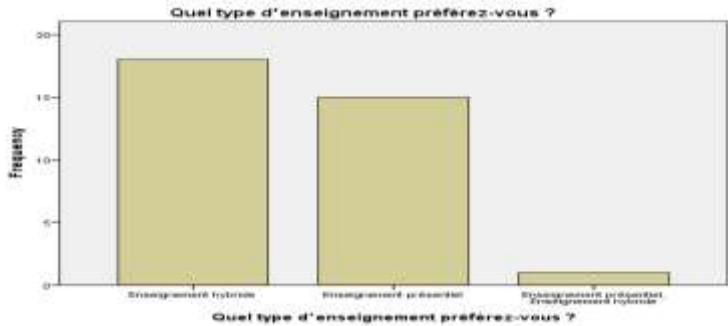


Figure 11 : Choix de type d’enseignement approprié

Il est fort important de savoir avec quelles méthodes pédagogiques l'ENT est exploité. Nous constatons au travers de l'histogramme présenté que la plupart des enseignants se contentent de diffuser des cours en ligne, soit 65,2 % alors qu'un taux assez restreint y ont recours pour assurer un accompagnement pédagogique connu sous le vocable de « e-tutorat », soit 4,3 % des répondants.

Quant à l'usage des TIC/E dans les séances de cours, l'histogramme ci-joint fait ressortir que l'exploitation des outils bureautiques prévaut, soit 43,5 % des répondants. On constate aussi un ratio disparate entre l'usage des outils bureautiques et les technologies mobiles, soit 13 % des répondants optent pour l'usage des technologies mobiles seules, et 4 % des répondants optent pour les logiciels multimédias.

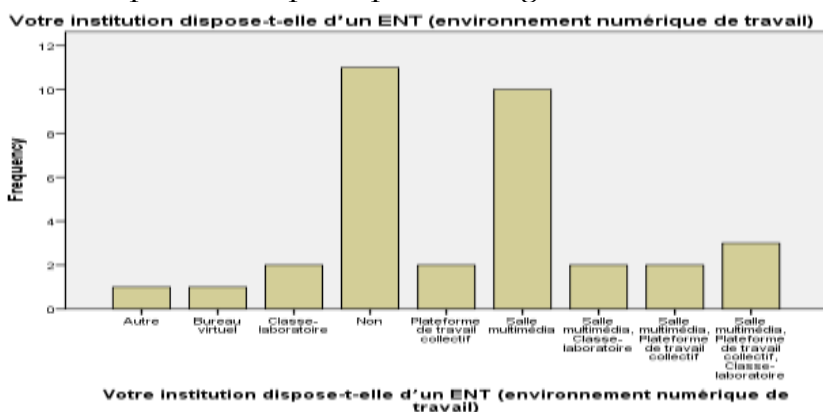


Figure 12 : ENT à l'université

Il est temps de mettre l'accent sur la manière dont les enseignants utilisent les TIC/E et identifier le canal de transmission des savoirs. Dans ce créneau, on peut dire que ces outils sont utilisés surtout par le biais de messagerie électronique et via des forums de discussion. Ces deux canaux représentent respectivement 21,7% et 8,7 mais également de

fréquence moins élevée par le biais de réseaux sociaux, soit 4,3 %.



Figure 13 : Procédés de transmission des savoirs à l’aune des TIC

On procède maintenant à passer en revue le ressenti des enseignants le moment où ils dispensent des cours à distance. A ce sujet, on déduit que le pilotage des cours en distanciel a une répercussion néfaste sur l’état d’esprit des acteurs pédagogiques en question. Ils exaltent des sentiments chevauchés : ceux d’anxiété, de découragement, d’incertitude, ... lesquels sont dus à la crainte de la non réussite.

Enfin, on s’intéresse dans ce rouage à la perception des enseignants à l’égard de leur progression professionnelle en utilisant un dispositif hybride. Il semble que le dispositif hybride ne fait que freiner la progression professionnelle et académique au regard de 6 enseignants enquêtés et il représente une entrave majeure, soit 26,1% des répondants, on ajoute que l’avancée professionnelle est rarement assurée

pendant le travail à distance, soit 8,7% des répondants le perçoivent. Or, elle est beaucoup plus assurée grâce aux échanges qui ont lieu pendant les cours dispensés en présentiel, soit 52,2 % des répondants le confirment.

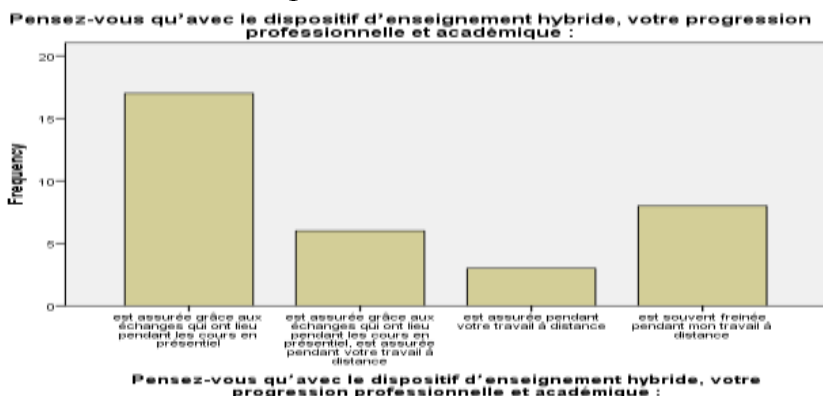


Figure 14 : Evaluation du dispositif hybride par les enseignants

5. Discussion

Il est opportun à ce moment de dépiapter les résultats obtenus d'une enquête menée par le biais d'un questionnaire qui se focalise sur la perception des enseignants universitaires de leurs pratiques pédagogiques hybrides en FLE entre centralité et périphérie et les mettre sous la loupe. Il nous appartient de mettre a priori en relief l'ambivalence à laquelle se heurte la communauté enseignante au niveau de l'enseignement supérieur en Algérie. Ce tiraillement alimente le cloisonnement entre la volonté d'agir professoral et la faille de formation en technologie éducative. A cet égard, la reconnaissance des enseignants à propos de l'importance d'intégration des TIC en éducation supérieure est flagrante. Cependant, l'efficacité pédagogique des TIC dépend moins

des technologies elles-mêmes que de la manière dont elles sont intégrées dans les situations d'enseignement-apprentissage, (Tardif, 1998). Du coup, établir des plans d'action en matière de formation à la pédagogie numérique devrait être une priorité majeure au profit de tous les enseignants. En effet, les résultats de l'expérience révèlent que la quasi-totalité d'enseignants se contentent de diffuser des documents en format PDF, cela s'explique par les difficultés rencontrées lors de la scénarisation et la conception des cours à distance. Dans cette perspective, (Nissen, E. 2019) parie la qualité des futurs enseignants qui suivent une formation technopédagogique dans leurs cursus universitaires. Ils sont ainsi prédisposés à jongler avec les différents volets de la compétence TSP et à les mettre en relation avec les contenus de formation. Les résultats auxquels nous avons abouti s'avèrent en conformité avec ceux de Mustapha Ait Kaci (2018) qui souligne le déficit de formation des enseignants, lequel est principalement dû au manque d'infrastructure adaptée ainsi la résistance au changement résultant des habitudes pédagogiques traditionnels. En ce qui concerne l'enseignement hybride, les résultats de l'enquête montrent un déséquilibre frappant entre le mode asynchrone et le mode synchrone, de telle sorte que le premier tend à prévaloir sur le second ; ce clivage est lié à plusieurs facteurs entre autres : problèmes de connectivité, plateformes peu adaptées, manque d'équipements, maîtrise limitée des outils synchrones, crainte de la faible participation des étudiants. (Kamel Boucherf et al, 2021). De par l'expérience menée dans cette étude, l'enseignement hybride se pratique de manière moins réfléchie au point où l'articulation du présentiel et du distanciel se tient en disproportion. Du coup, le recours à la pédagogie inversée est une vocation pertinente susceptible

de canaliser ladite hybridation. (Lebrun, M. 2015). Dans ce créneau, nonobstant la complexité de la pédagogie inversée, des expériences conséquentes donnant des résultats probants ont été réalisées dans le contexte universitaire algérien, elles corroborent l'efficacité de la classe inversée qui a été pilotée dans des situations d'enseignement-apprentissage diverses. (Nid,M.-T. 2023; Boudina,B. 2024 ; Moulay Omar, A. 2023). Si on renvoie à l'exploitation de plateformes numériques promulguées par le ministère de l'enseignement supérieur et de la recherche scientifique algérien, on constate que Moodle qui a été officiellement agréée pendant la crise sanitaire Covid19 a été une palette de numérisation pédagogique incontournable de maintenir la transmission des savoirs, perdure jusqu'aujourd'hui. En revanche, il faudrait mettre en place des plateformes adaptées à l'image de Moodle cloud, Blackboard Learn, Canvas (Instructure), etc.

Par-dessus le marché, les résultats de recherche que nous avons menée révèlent que l'enseignement hybride du Français Langue Etrangère (FLE) à l'aune des TIC exige la mise en œuvre d'outils technologiques variés : technologies bureautiques et technologies mobiles. Celles de la première catégorie s'emploient souvent dans les espaces institutionnels et structurés (salles de classe, plateformes numériques officielles) où l'enseignement se déroule dans un cadre planifié, organisé et évalué. Cela signifie que ces outils correspondent à l'usage formel considéré désormais comme focalisation centrale. A l'inverse, celles de la deuxième catégorie sous-tendent les contextes informels, décentralisés voire périphériques (réseaux sociaux, applications mobiles, interactions quotidiennes). Cependant, il est crucial de bannir cette rigidité et favoriser une conciliation qui allie rigueur académique et immersion flexible, tout en encourageant l'interaction bilatérale enseignant-apprenant.

D'un autre côté, la disponibilité massive des outils de l'intelligence artificielle (IA) résout une partie importante de problèmes d'ordre technique. Les potentiels dont ils disposent permettent de pallier certains dysfonctionnements, c'est le cas notamment de désengagement en synchrone et la latence des plateformes. En contrepartie, ils mettent en avant des alternatives optimales, on en cite : Chatbots interactifs (ex : ChatGPT intégré), optimisation des flux vidéo (IA réseau), (Karim Bouzid et al, 2023). Toujours est-il, la motivation des enseignants demeure un élément clé pour adopter une pratique pédagogique réussie tout en déconstruisant certaines perceptions qu'ils jugent périphériques, voire marginales et en réconfortant celles qualifiées de centrales.

Conclusion

Cette étude, fondée sur une enquête administrée par questionnaire menée auprès de 34 enseignants du FLE affiliés à des universités algériennes, a pour vocation d'analyser leurs perceptions concernant l'enseignement hybride entre centralité et périphérie. Les résultats obtenus révèlent des tendances significatives, mais aussi des divergences reflétant les défis et les opportunités liés au thème susmentionné. Il ressort que les représentations qui émanent des enquêtés en matière de l'hybridation en tant que stratégie de formation innovante pour la période post-pandémique de Covid 19 oscillent entre engouement pour ses potentialités pédagogiques et scepticisme face aux contraintes techniques. Cette enquête a permis de déceler le vécu professionnel du personnel enseignant au supérieur à travers les répondants qui expriment une frustration faute de formation insatisfaisante

en matière de pédagogie hybride, laquelle se distingue par ses propres fondements préconisés par l'équipe Hy-sup (2009) Dans ce sens, il est crucial de préciser que toute stratégie pédagogique innovante nécessite une politique éducative assez claire mettant au point des ressources sur lesquelles s'appuie l'enseignant lors de la scénarisation pédagogique. En effet, la conception et l'implémentation des cours, selon les spécialistes, est une tâche délicate et chronophage (Eid et al., 2019 ; Lebrun, 2015). Ainsi, minimiser la part de périphérie dans les pratiques pédagogiques dans le système éducatif universitaire algérien stipule la mise en place des formations flexibles, continues et surtout certifiantes et l'adaptation des curricula avec des activités hybrides. Telles initiatives permettent de reconfigurer les pratiques pédagogiques à l'ère des TIC, parce que l'hybridation n'est pas qu'une question technologique, mais un changement de paradigme qui requiert un temps long d'appropriation (Peraya, 2022). Si la formation hybride en FLE demeure encore perçue comme périphérique par un nombre important d'enseignants algériens, des indices rassurants émergent, en particulier chez les jeunes formateurs initiés à l'éducation numérique. Ceci dit, la focalisation centrale de l'hybride en Algérie relèvera de l'amélioration des infrastructures, la formation pédagogique numérique, l'élaboration des guides de formation pédagogique aux TICE pour les enseignants une volonté politique claire, l'innovation d'une nouvelle didactique des TICE « e-didactique » Beyat.A, (2023). La présente contribution s'inscrivant dans des prémices de réflexion fait part de repenser la place de l'hybride dans la formation des enseignants de FLE, en faisant de la périphérie actuelle un levier de centralité future.

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Renewable Energies and Their Role in Achieving Sustainable Development

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Abstract:

Renewable energy is considered one of the most important available energy alternatives worldwide and a key element in achieving sustainable development. The relationship it utilizes to meet the requirements of sustainable development in Algeria, which has sought to invest in these resources, is through the establishment of a renewable energy and energy efficiency program. This program aims to enhance the reliance on renewable energy across various sectors to achieve economic and social objectives while preserving the environment.

Keywords: *Renewable Energy; Sustainable Development; Energy Efficiency; Environment.*

Les énergies renouvelables et leur rôle dans la réalisation d'un développement durable

Résumé :

Les énergies renouvelables sont considérées comme l'une des plus importantes alternatives énergétiques disponibles dans le monde et comme un élément clé dans la réalisation du développement durable. La relation qu'elle utilise pour répondre aux exigences du développement durable en Algérie, qui a cherché à investir dans ces ressources, passe par la mise en place d'un programme d'énergies renouvelables et d'efficacité énergétique. Ce programme vise à renforcer le recours aux énergies renouvelables dans les différents secteurs afin d'atteindre les objectifs économiques et sociaux tout en préservant l'environnement.

Mots-clés : Énergie renouvelable ; Développement durable ; Efficacité énergétique ; Environnement.

Introduction

The world is witnessing significant industrial development and continuous growth in the economies of major industrialized nations. In recent years, global energy demand has clearly risen. Amid this increasing need for conventional energy sources, the negative consequences on the environmental and developmental features of nations have intensified, so driving the quest for alternative energy sources to reach thorough and balanced sustainable development. This would allow the growth of national economies considering many facets of human existence.

Adopting plans and creating laws meant to find other energy sources has also become rather crucial. Moreover, initiatives for international cooperation have been investigated to promote the use of renewable energy sources in a manner that protects the environment and guarantees sustainable development in many sectors for several generations. Given that conventional fossil energy sources are depletable and now the primary contributors to the rising emissions of hazardous gases into the atmosphere, which generate global warming, this is especially crucial.

As for Algeria, the development of renewable energy is of great importance to the public authorities, who aim to replace fossil fuels with renewable energy across various sectors. This is to achieve specific objectives in line with the plans and strategies followed in this context, particularly the goal of energy independence from oil and meeting the requirements of sustainable development. To this end, the government has established an ambitious program to develop renewable energy, improve energy efficiency, and implement a suitable legislative and regulatory framework.

From here, we raise the following question: What role do renewable energies play in achieving sustainable development in Algeria?

1. The Concept of Renewable Energies and Their Importance

1.1 Definition of Energy

Energy is the ability of matter to exert a force capable of accomplishing a specific task. It is the capacity of a system to produce effectiveness or external activity. It is a physical quantity that manifests in the form of heat, mechanical motion, or as binding energy in atomic nuclei or protons and neutrons (Abdullah 2016, 160).

1.2 Definition of Renewable Energy

Renewable energy refers to energy that recurs naturally and periodically in nature. It is energy generated from an inexhaustible natural source, readily available across the Earth's surface, and can be easily converted into usable energy. Renewable energy is characterized by being environmentally friendly, clean, and non-polluting. Unlike non-renewable energy, which is depletable, the use of renewable energy does not lead to its exhaustion. In contrast to conventional energy, such as solar and wind energy, which require transportation mechanisms that are present in most countries, renewable energy is a local source that remains consistent with the reality of development. Development depends on three key factors: economic, social (improving infrastructure and ensuring human rights), and environmental (balancing nature with humanity and preserving the ecological system). Renewable energy ensures continuous availability at an affordable price, does not produce noise, and

leaves no harmful waste that could damage the environment. (Abdullah 2016, 160).

1.3 Importance of Renewable Energy

1.3.1 Energy Security

Although the concept of energy security is relatively modern and has gained notable attention in recent years, the pursuit of securing energy needs by societies and nations is not a recent phenomenon. Attempts to control energy sources were a fundamental driving force behind many past conflicts, and were also a factor in fostering rapprochement and cooperation between various countries. In fact, the term "energy security" was directly used during World War I. With the continuous increase in global energy consumption, the reserves of fossil energy sources, particularly petroleum, are dwindling, leading to their depletion and the potential for exhaustion. This has prompted the consideration of alternative sources to sustain energy, which has indeed been the case, as statistics indicate (Rawaikiya 2019, 107).

Global consumption of renewable energy has consistently increased, reaching approximately 316.9 million tons of oil equivalent (Mtoe) in 2014 compared to 283 Mtoe in 2013, thus accounting for 2.5% of global energy consumption (Rawaikiya 2019, 107).

1.3.2 Climate Change

The use of renewable energy will reduce the emissions of greenhouse gases.

1.3.3 Decreasing Cost of Renewable Energy

The decreasing cost of renewable energy is one of the key incentives driving countries worldwide to adopt renewable

energy sources. The early years of interest in these sources saw an increase in costs, but this has steadily decreased, primarily due to improvements in the technology used to produce these energies. This decline will continue as the industry matures.

1.3.4 The Necessity of Diversifying Energy Sources

To reduce the pressure on the use of petroleum as a depleting resource, it is essential to rationalize the use of these resources and find new, renewable energy alternatives.

1.3.5 The Abundance of Studies on Alternative Energies

Numerous conferences have been held on this topic. For example, in 2001, an international conference on renewable energy was organized, during which the urgent need to accelerate its exploitation was emphasized, given the ever-increasing demand for energy over time.

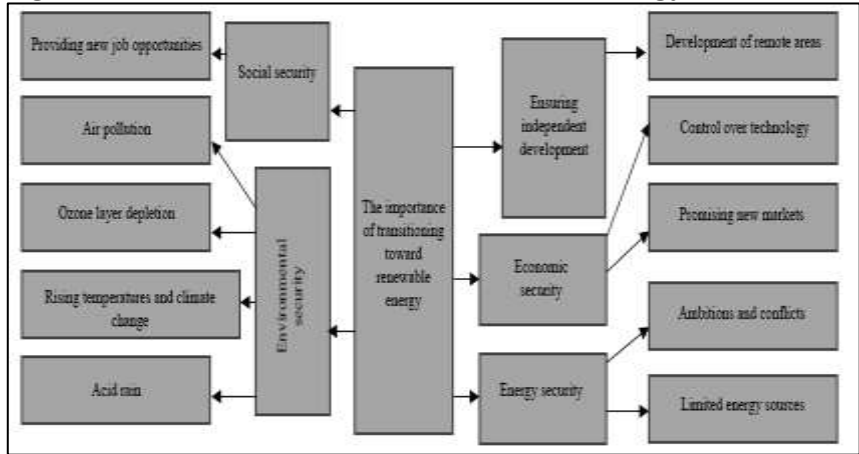
Given that oil-producing countries, in particular, hold significant importance in the global energy sector, their shift toward developing renewable energy use will offer them many other advantages, including:

- The shift of oil-producing countries towards renewable energy can help preserve their depleting resources.
- Investment by oil-producing countries in renewable energy will transform them from oil and gas producers and exporters into important international players in the energy sector.
- The diversification of energy sources in oil-producing countries enables them to achieve energy security.
- By diversifying energy sources, oil-producing countries can preserve their resources and extend the period of their exploitation.

- Diversification of energy sources in oil-producing countries enhances and develops their human capital.

The following figure summarizes the importance of renewable energy in terms of securing sustainable development, food security, and energy security itself (Rawaikiya 2019, 108).

Figure 1. The Importance of Renewable Energy



Source: (Tekwante 2012).

2. Types of Renewable Energy

Renewable energy takes various forms and types based on the nature and source of its origin. The most prominent of these include solar energy, wind energy, tidal energy, geothermal energy, hydroelectric energy, biofuels, and biomass energy.

2.1 Solar Energy

The sun is considered the essential source of energy necessary for life on Earth, and it is the primary source of energy in all its forms, whether fossil or renewable. Solar energy

is the most important among new energy sources, with many countries investing substantial efforts through scientific research to develop methods for harnessing it as an alternative to oil and gas (Kamal and others 2018, 06).

Solar energy is considered the largest alternative to petroleum in electricity generation. It is a relatively new technology and holds a promising position in the energy field. Its resources are vast, its environmental impact is limited, and it provides countries that are most exposed to sunlight with an opportunity similar to that which is currently provided by offshore wind farms in European countries with wind-exposed coastlines (Laajal 2020, 165).

2.2 Wind Energy

Wind energy is converted into electrical energy using large turbines. It is the fastest-growing and most rapidly expanding renewable energy source worldwide. Germany leads the world in wind energy utilization. Despite the widespread expansion of wind farms, they face some environmental challenges, particularly regarding the large areas of land they require (Laajal 2020, 165).

2.3 Tidal Energy

Tidal energy is a type of mechanical energy stored in the currents generated by the rising and falling tides, which are naturally caused by the gravitational pull of the moon and the sun, as well as the Earth's rotation around its axis. This energy is classified as renewable, and these two phenomena are exploited by utilizing the currents stored in water during the occurrence of the tidal cycles.

2.4 Geothermal Energy

Geothermal energy is a clean and renewable energy source. It is high-temperature thermal energy of natural origin, stored within the Earth's interior. This thermal energy is primarily used for electricity generation, and the heat is extracted from underground reservoirs through wells or other methods (Al-Taif 2019, 171).

2.5 Hydroelectric Energy

Hydroelectric energy is the electrical power generated from the potential energy of water through the utilization of its movement. This type of energy harnesses the power of water motion to generate electricity and is considered to be extremely clean with widespread use (Al-Taif 2019, 171).

2.6 Biofuel Energy

Biofuel is one of the most important forms of renewable energy, serving as a suitable alternative to oil. It contributes to providing healthy supplies derived from alternative energy sources. Some of the most commonly used plants in sustainable biofuel production include sugarcane and algae.

2.7 Biomass Energy

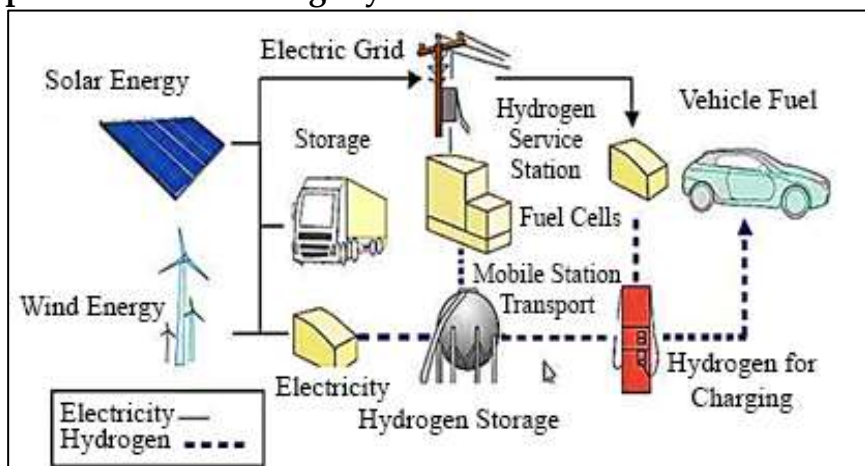
Biomass energy refers to the energy derived and extracted from all types of materials related to living organisms, such as wood, grasses, and animal waste. A drawback of this energy is that the combustion of these organic materials results in the emission of carbon dioxide (Al-Taif 2019, 171).

2.8 Green Hydrogen Energy

Green hydrogen is produced through the electrolysis of water in an electrolyzer, with electricity supplied from re-

newable energy sources such as hydroelectric power, wind energy, or solar energy. If desalinated water is required, the rest of the process is fully supported by solar and wind energy, ensuring that no greenhouse gases are emitted during this process. (Badri Abdel Aziz, 2018, 2019, p. 69).

Figure 2. The following diagram illustrates the hydrogen production and storage system



Source:(Saadi 2016, 02).

3. Definition of Sustainable Development

Sustainable development has several definitions, including the following:

Sustainable development refers to the management and use of natural resources, such as soil and water, in an efficient manner without waste or delay, along with continuous maintenance. It also involves the rehabilitation of the investment and utilization processes for these resources, coupled with human development in various forms, whether economic, health-related, educational, recreational, or cultural. All of this aims to meet both current and future human

needs through a network of responsible institutions and in accordance with multiple techniques, as well as the socially acceptable modern economic and technological capabilities. (Al-Samarrai 2016, 09).

The definition from the Brundtland Commission in 1987, in the report *Our Common Future*, is the most famous and widely accepted in the scientific literature. It emphasizes the protection of future generations' resources. According to the Commission, sustainability means:

Meeting the needs of the present generation without compromising the ability of future generations to meet their own needs. It should be noted that the essential idea behind this definition lies in the "principle of the necessity to preserve resources for future generations (Aouali 2018, 169)."

4. Characteristics of Sustainable Development

Sustainable development has several characteristics, as follows:

Sustainable development differs from general development in that it is more deeply interconnected and more complex, especially concerning what is natural and social in development.

- Sustainable development means bringing about changes in all aspects of economic life, represented by an increase in the per capita real income as well as preserving natural resources, whether renewable or non-renewable, through their rational exploitation.
- Sustainable development is a continuous process, both in the present and the future, which satisfies the needs and aspirations of both the present and future generations. The state aims to achieve development across all sectors to benefit future generations.

- Sustainable development is an inclusive and shared responsibility, encompassing all state sectors, and it is the duty of the state at all levels to contribute to the decision-making process.
- The term "sustainable development" is considered a global term, derived from political, economic, and cultural studies that have contributed to introducing a concept that embodies sustainable development.
- Sustainable development has goals it seeks to achieve through effective mechanisms and principles upon which it is based (Khaled 2020, 61).

5. Dimensions of Sustainable Development

The dimensions of sustainable development, based on the previous definitions, encompass a set of interrelated aspects that aim to achieve sustainable development. These dimensions are economic, human, environmental, and technological.

5.1 Economic Dimensions

Through focusing on:

- Determining the share of individual consumption from natural resources
- Stopping the waste of natural resources
- Addressing the pollution issue in developed countries and finding solutions
- Reducing the dependence of developing countries
- Focusing on sustainable development in poor countries
- Ensuring equality in resource distribution
- Reducing income disparities
- Cutting down military expenditures

5.2 Human Dimensions

- Determining the final population size
- The importance of population distribution
- Full utilization of human resources
- Health and education
- Highlighting the significance of women's roles
- Achieving a democratic socialist system of governance

5.3 Environmental Dimensions

- Soil degradation, pesticide use, destruction of vegetation, and fishing grounds
- Protection of natural resources
- Water conservation
- Reduction of habitats for biological species
- Protecting the climate from global warming

5.4 Technological Dimensions

- Use of cleaner technologies in industrial facilities
- Adoption of advanced technologies and regulatory legal frameworks
- Fuels and global warming
- Reducing gas emissions
- Preventing the degradation of the ozone layer .

6. Sustainable Development Goals

The Sustainable Development Goals (SDGs) consist of a diverse set of objectives that cover various aspects influencing human life and the entire planet. These goals include areas such as the eradication of poverty in all its forms, achieving gender equality, ensuring quality education, guaranteeing access to sanitary facilities and clean water, com-

bating climate change, and safeguarding the environment, and promoting partnerships to achieve these objectives, among many others.

All United Nations member countries in 2015 approved the SDGs meant to eliminate poverty, lower inequality, and create more peaceful and prosperous societies by 2030. A call to action for building a world where no one is left behind, the SDGs—also called the "Global Goals".

More than 100 UN member states have committed to children's rights in the context of implementing the SDGs. UNICEF works with governments, partners, and other UN agencies to assist countries in ensuring that these goals result in tangible outcomes for every child, both for today's generations and future ones.

- Eradication of poverty in all its forms - Complete eradication of hunger
- Gender equality, high-quality education, and good health and well-being
- Clean water and sanitation - Affordable and clean energy
- Decent work and economic growth - Industry, innovation, and infrastructure
- Reduced inequalities - Sustainable cities and communities
- Responsible consumption and production - Climate action
- Life below water - Life on land
- Peace, justice, and strong institutions - Strengthening the means of implementation and revitalizing the global partnership for sustainable development (Aboud 2023, 496)

Figure 3. illustrates the Sustainable Development Goals

Source: (United Nations Educational, Scientific and Cultural Organization n.d.).

7. Sustainable Development and Its Relation to Renewable Energies

The direction of sustainable development in dealing with natural resources in a sustainable manner means considering the limited nature of resources and avoiding environmental pollution. Therefore, renewable energies represent hope and the future for energy production, replacing traditional sources. The United Nations has held numerous conferences to achieve this goal.

7.1 Social and Economic Dimensions of Sustainable Development Related to the Energy Sector

The United Nations Conference on Environment and Development, held in June 1992, marked the beginning of an

important phase of international cooperation founded on acknowledging the need to combine environmental issues and development. This integration guarantees the sustainability of the development process, which requires meeting the economic and social development needs of current generations while preserving the environment and considering the rights of future generations to development. The chapters in the first part titled "Social and Economic Dimensions of Sustainable Development" of Agenda 21 include goals and activities related to the energy sector, as follows:

7.2 In the Field of Combating Poverty

Providing sustainable living conditions for populations in impoverished areas, relying on the sustainable management of available resources, while also offering appropriate job opportunities and favorable health and educational conditions to enhance economic growth in these regions.

7.3 Proposed Activities Include

- Developing appropriate infrastructure for development and suitable technologies for use in these areas.
- Introducing the necessary standards for managing and preserving available resources to meet the basic needs of the population.

7.4 In the Field of Changing Consumption Patterns

Encouraging sound production and consumption patterns that meet human basic needs while focusing on environmental preservation; achieving production efficiency and changes in consumption patterns to focus on optimizing resource use and minimizing waste. This requires a shift in the attitudes of governments, families, and individuals through the following:

- Promoting increased efficiency in the use of available energy and resources;
- Minimizing emissions to the lowest possible level to reduce pollution;
- Helping individuals and families make environmentally sound purchasing decisions;
- Implementing environmentally sustainable energy pricing policies, taking into account the social conditions of poor populations, and supporting values that promote responsible consumption;
- Supporting research and development activities in the field of consumption assessment, as well as introducing new concepts for resource use in ways that foster successful economic growth and the development of regional and international cooperation programs aimed at achieving sustainable consumption patterns.

7.5 In the Field of Sustainable Development of Human Settlements

This section includes two energy-related programs:

- "Achieving Integration in the Provision of Basic Services in Locations" Program: Its activities involve providing settlement areas with the necessary infrastructure, including energy and water facilities, by 2025. All developing countries should incorporate activities related to technical, financial, and human resources into their national programs and strategies to improve the integration between infrastructure and environmental planning.

7.6 Program for Providing Sustainable Energy and Transport Systems in Human Settlements

This program includes several activities to achieve sustainable development in settlements, such as:

Providing the necessary technologies and practical solutions to improve energy efficiency: Renewable energy technologies have been developed, and their applications have been expanded to serve human settlements, reducing the harmful environmental impacts of energy production and consumption on human health, particularly those related to air pollution and water sources in urban areas.

8. The Role of Renewable Energy in Achieving Sustainable Development in Algeria

Algeria possesses significant potential in the field of renewable energy, particularly solar energy. Renewable energy is considered a key driver for sustainable economic development and is central to national energy and economic policies through 2030. It is expected to provide approximately 40% of energy needs, primarily from photovoltaic and thermal solar energy.

8.1 Renewable Energy and Energy Efficiency Program

In 2011, Algeria launched an important program for the development of renewable energy, extending over the next two decades. In addition to the environmental aspect and the commitment to diversifying energy sources, Algeria also aims to determine the lifespan of its hydrocarbon reserves and exploit its vast solar and wind energy potential. This effort aims to meet internal electricity needs and export a portion of this energy to European countries.

8.2 Renewable Energy Program

The renewable energy projects aimed at electricity production for the national market are divided into three phases (Kloum and Iman 2011, 05-07).

The program, from now until 2020, includes the implementation of sixty (60) solar thermal plants, wind energy fields, and various other stations. The first phase (2011-2013) focuses on the realization of pilot (model) projects and testing various available technologies. The second phase (2014-2015) involves direct changes in program deployment. The third phase (2016-2020) is dedicated to large-scale implementation.

8.3 Energy Efficiency Program

The energy efficiency initiative tackles Algeria's wish to encourage the best and responsible use of energy sources. Energy efficiency aims to generate the same advantages or services with as little energy as possible. Among the components of the energy efficiency program are:

- The use of thermal insulation in buildings to lower energy use connected to heating and cooling.
- The installation of solar water heaters to replace traditional water heaters
- The widespread use of low-energy consumption light bulbs
- Encouraging local production by creating partnerships between local and foreign producers (Ministry of Energy and Mines 2011, 05)

Conclusion

The significance of the role that renewable energies play in achieving the dimensions of sustainable development, while preserving the environmental heritage for future generations, highlights the necessity for countries to adopt a development model based on renewable energies. Given that Algeria is rich in renewable energy resources, particularly solar energy, it is well-positioned to become a leading country in the export of clean energy. For this reason, the Algerian government has paid considerable attention to the development and utilization of renewable energies, considering the available resources.

To achieve this, Algeria has established numerous bodies and centers dedicated to this cause and has developed long-term strategies and programs to promote renewable energy. Furthermore, significant financial resources have been allocated to encourage investment in this sector, with some initiatives already implemented and others currently underway.

Although its energy production from these sources remains below the expected level and available potential, it seeks to harness these sources for its sustainable development.

This can only be achieved by creating a conducive environment that encourages investment in this area, as well as providing full government support for both the preservation of renewable energies and the various related centers. This will enable the country to achieve the objectives for which they were established.

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Provisions and forms of civil litigation before the criminal judiciary

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Abstract

The public prosecution, as a representative of society, acts on its behalf to claim this public right and its means of doing so is the public prosecution. However, the criminal act may extend its effect to cause damage to the personal rights of individuals, which gives them the right to demand compensation for these damages and recover them by filing a civil lawsuit.

However, some legislations, including the Algerian penal legislation, have made an exception to this general rule based on certain considerations related to both the perpetrator and the victim, allowing the civil lawsuit to be considered ancillary to the public lawsuit to claim compensation for the damage arising from the same offence in accordance with specific conditions and forms where they are adjudicated in accordance with the rules of criminal procedure and before the penal judiciary.

Keywords: Dependency, Civil Action, Criminal Action, Jurisdiction, Damage, Compensation, Prosecution, Intervention.

Dispositions et formes du contentieux civil devant le juge pénal

Résumé

Le ministère public, en tant que représentant de la société, agit en son nom pour revendiquer ce droit public et son moyen d'action est l'action publique. Cependant, l'acte criminel peut étendre ses effets jusqu'à causer des dommages aux droits personnels des individus, ce qui leur donne le droit d'exiger la réparation de ces dommages et de les recouvrer en se constituant partie civile.

Toutefois, certaines législations, dont la législation pénale algérienne, ont apporté une exception à cette règle générale sur la base de certaines considérations liées à la fois à l'auteur et à la victime, permettant à l'action civile d'être considérée comme accessoire à l'action publique pour demander la réparation du dommage résultant de la même infraction selon des conditions et des formes spécifiques lorsqu'elles sont jugées conformément aux règles de la procédure pénale et devant la juridiction pénale.

Mots-clés : Dépendance, Action civile, Action pénale, Jurisdiction, Dommage, Indemnisation, Poursuite, Intervention.

Introduction:

Most legislations, including the Algerian legislation, in their division of jurisdiction, have resorted to the establishment of criminal courts that are competent to adjudicate public proceedings whose subject matter is an offence and apply the Code of Criminal Procedure and civil courts that hear civil cases whose subject matter is a claim for compensation for harmful acts and apply the rules of the Code of Civil Procedure, thus establishing a general rule in judicial jurisdiction and making it a requirement of public order that the two cases cannot be brought before the same judicial body. However, some legislations, especially those derived from the Latin system, we find that they have addressed in their criminal laws, specifically in their procedural part, the position of the civil claimant in order to emphasise the importance of protecting the private civil right alongside the public right, which the public prosecution, as a representative of the state, is responsible for preserving, as the civil claimant is considered an opponent in the criminal case and is himself an opponent with a civil right in the civil case filed before the criminal judiciary due to its connection to the criminal case and the fact that the link between the damage and the crime that is the subject of the criminal case is what made the legislator depart from the original in making the criminal judiciary responsible for initiating the case. The Supreme Court has enshrined this principle in a decision (Criminal Decision, p 304), the content of which is that the civil action may be brought simultaneously with the public action before the same judicial body.

In view of these considerations, the importance of studying the provisions of the ancillary civil lawsuit emerges

and we present the following questions: What is an ancillary civil action and how does the Algerian criminal legislator regulate the procedures and conditions for its exercise?

To answer the question at hand, we chose to study this topic in the framework of two main articles, the first of which deals with the nature of the ancillary civil suit and the second with the conditions and forms of its exercise. We present them as follows:

1. The Nature of the Rule of Subordination of Civil Action to Criminal Action

First, we attempt to a conceptual framework for the rule by defining it and clarifying its justifications, subject matter, and conditions for its practice as follows:

1.1. Definition of the ancillary civil suit

The criminal jurisprudence defines the subordination civil suit as that civil claim whose subject is the demand of the victim of the crime for compensation for the damage, which is considered alongside the criminal claim according to the theory of subordination. The intended subsidiarity here refers to the procedures and not the subject matter. (Abdul Raouf O., 2004).

1.2. Justifications for the Subordination of the Civil Claim to the Criminal Claim

The subordination consideration of the civil claim before the criminal courts results in several advantages that contribute to achieving the requirements of justice in the case, benefiting society, the accused, and the victim. We attempt to clarify this as follows:

1.2.1. Contributing to achieving community security and tranquility

Most legislations that adopted the idea of the subordination civil claim to the criminal claim as an exception to the general rule in functional judicial jurisdiction recognized the effectiveness of this rule in deterring criminal behavior and achieving a general sense of justice and balance in society, away from illegal means of individual revenge and the desire for retribution against the perpetrator, especially in crimes where material compensation is insufficient to remedy the psychological harm inflicted on the victim, as in honor and modesty crimes that require punishment of the perpetrator. Even if the victim waives their civil right to seek compensation, the criminal penalty remains in effect and applicable. (Granier J., 1958, p. 3)

1.2.2. Protecting the interests of the victim

One of the most important characteristics of the subordination civil claim to the criminal claim is the speed with which the victim can obtain their rights or material or moral compensation for the damage caused by the crime, considering that the litigation procedures before the criminal judiciary are shorter in duration compared to those practiced at the level of ordinary courts, where trials may be prolonged, potentially leading to the loss of civil rights due to the despair or boredom of the civil claimant. (Sorour A.F, 2002, p 197).

It may also happen that the victim files a compensation claim before the civil court, according to the principle that criminal proceedings suspend civil ones, the consideration of the civil claim will be halted until the criminal claim is

resolved, which will inevitably delay the victim's receipt of compensation. (Edward G., p 32).

The subordination nature of the civil claim to the criminal judiciary offers numerous advantages to the victim, the most important of which is benefiting from the criminal judge's mandates and powers to search for evidence and the evidence presented by the investigating authorities during the criminal proceedings, which facilitates the victim's proof of damage and thus provides the criminal aspect of the civil ruling with a guarantee of enforcement and obtaining compensation. (Hosni M.N., 1988, p. 298).

In addition, the effect of the authority of the criminal judgment before the civil judiciary guarantees the victim, upon conviction, that established and definitive right before everyone to obtain compensation, whether it is decided by the criminal court or the civil court, according to the direction and choice of the civil plaintiff. (Edward G., p. 36-37).

1.2.3. The Interest of the Accused:

The failure to adopt the principle of connection between the criminal and civil lawsuits arising from the same crime will inevitably burden the accused, who will find himself compelled to defend himself scattered before both the civil and criminal courts at the same time, which is not trivial. Therefore, the dependency of the civil lawsuit on the criminal lawsuit will alleviate the burden on the accused, who will benefit from it by concentrating his efforts on presenting his defense before only one of them. (Al-Habashneh, A.A., 2015, p 14).

Moreover, if the victim fails to prove his right before the criminal judiciary, his task will be even more difficult before the civil judiciary, as he will be considered a defendant in the crime and has failed to prove this right before the same

authority, especially if the plaintiff has initiated the criminal lawsuit as a civil plaintiff. The accused here has the right to benefit from this failure, and the plaintiff will not have the right to demand civil compensation. Additionally, the accused who has been acquitted before the criminal court can himself claim compensation from the plaintiff by returning to the same court for the damages he suffered due to the civil lawsuit being filed against him. (Al-Fadhil. M., 2003, p. 277).

1.3. The Subject of the Subordination Civil Lawsuit

1.3.1. Compensation

Through the examination of Article 2 of the Code of Criminal Procedure, Order No. 66-155 dated July 8, 1966, which includes the amended and supplemented Code of Criminal Procedure by Order 21-11 dated August 25, 2021.

We conclude that the right to the subordination civil lawsuit lies in compensating for the damage suffered by those who have personally suffered direct harm caused by the crime. This damage may affect the victim's body, resulting in physical disability, material damage, or moral damage that affects his honor or personality. This is what the subordination civil lawsuit guarantees, where every victim of a felony, misdemeanor, or violation has the right to establish himself as a civil party to obtain compensation. (Tahiri H., 1996, p. 19).

It is worth noting that the active accused and the accomplice are equal in the civil lawsuit, and whenever there are multiple accused, they are all considered jointly liable and equal in paying compensation as they are partners in the harmful act, provided that the intent and unity of thought at the time of committing the crime are established, as con-

firmed by Article 126 of the Algerian Civil Code. The current study will present the three forms of compensation in the following points:

1.3.2. Compensation in its narrow sense

The legal means to compensate for the damage inflicted on the victim, and the basis for estimating the value of compensation is the distinction between the nature and types of damage: we clarify this as follows:

--The criterion of damage in estimating the value of compensation

The civil lawsuit is based on several foundations, the most important of which is the damage resulting from the crime. This latter is defined as the harm that affects a person in their rights or in a legitimate interest, whether related to the safety of their body, emotions, property, honor, or otherwise.(Marqus S., 1997, p. 133).

-- estimating the value of compensation

The responsibility for estimating the value of compensation lies with the court of first instance, and this is done according to the extent and severity of the damage, as well as the impact of the crime on the victim currently and in the future. This is understood from the text of Article 131 of the Civil Code, Order No. 75-58 dated September 20, 1975, amended and supplemented by Law No. 07-05 dated May 13, 2007. The law did not specify the amount of compensation granted to the victim in the context of all criminal acts, whether felonies, misdemeanors, or violations, except for traffic accidents, as indicated in the first paragraph of Article 182 of the Civil Code.

Determining the amount of compensation may be at the request of the victim, as it is a personal right, provided that its value does not exceed the maximum limit that can be

ruled. The court may not award a value greater than what was requested, and if it reduces the value, it must clarify the reasons that led it to do so. It is worth noting that the objective criterion for estimating compensation in civil rights should be independent of the criminal aspect, so that the penalty's aggravating or mitigating circumstances are not linked to the value of the compensation.

In determining the value of compensation, the judge must take into account the social or family status as well as the living standards of the victim, as indicated in Article 131 of the Civil Code. Additionally, the opinion of experts should be considered if necessary to assess the technical damages, to increase certainty about the fairness of the compensation awarded.(Faridj, H., 2018, p. 1290). This is what the Algerian legislator followed in Article 47 and the following articles of the Civil and Administrative Procedures Law, where the judge is authorized to resort to experts and specialists, and he is not obliged to rely on the expert reports; he can accept or reject them, and he can request a counter-expertise to reveal the actual damage, and these reports are not subject to review by the Supreme Court.(Judicial jurisprudence, p. 53).

As for moral damage, it is difficult to establish a true measure of its value, as it varies from person to person according to their psychological or moral endurance. Therefore, we find differences in how moral compensation is estimated financially and in many instances. (Abdul Sattar, f.,p. 180).

1.3.3. Judicial restitution or in-kind compensation

Restitution means restoring the situation to what it was before the crime was committed, and in its narrow sense, it

means returning things to their original owner, for example, returning stolen goods that are the subject of the crime, not the price of the stolen goods after they have been sold. In its broader sense, it may involve demolishing a building that was constructed in violation of the law, or closing a shop opened without a license, and erasing forged phrases, among others. (Fawziya Abdul Sattar, F., p. 193).

That is, the response is an attempt to end the unlawful factual situation that arose from the committed crime and to restore the situation to its correct state before the crime occurred. The response, in its broad or narrow sense, aims to limit the damage resulting from the crime; therefore, some consider it a complement to monetary compensation, and the court may rule on both together. Monetary compensation differs from the response in several aspects, the most important of which are as follows:

- Compensation is only granted based on a request from the civil plaintiff or those concerned, while the response can be ruled by the court at any stage of the case without the need for a request or insistence from the civil plaintiff or those with standing in the case.

- Compensation is only for those harmed by the crime or their heirs, or for the accused in the case of an acquittal due to the lack of validity of the defendant's claims. In contrast, in the case of a response, the court may rule it in favor of the victim or those concerned, provided they are the owners of the items or funds subject to the response.

- Compensation can only occur after damage has arisen from the occurrence of the crime, while the response is linked to the right of ownership of the items placed under judicial control, and thus it is based on a right that precedes the occurrence of the crime. The provisions regarding the

response are found in Articles 372 to 378 of the Code of Criminal Procedure.

The civil plaintiff exercises their right to demand a response either by filing a civil claim before the investigating judge or intervening before the ruling authority, provided this is done before the closure of the pleadings and before the public prosecution presents its requests, as per Article 293 and Article 242 of the Code of Criminal Procedure, or by direct claim before the court, provided the plaintiff respects the procedures for summoning as stipulated in Article 337 of the Code of Criminal Procedure.

1.3.4. Judicial Expenses

Judicial expenses are defined as those fees paid to the public treasury in every case in exchange for its resolution, including expenses for experts, inspections, hearing witnesses, treasury fees, and other expenses incurred by judicial authorities. (Hzit M., 2010, p. 38).

In general, judicial expenses are considered a form of compensation in its broad sense, whether as compensation to the state for the expenses it incurred in the criminal case or as compensation to the civil plaintiff for the expenses they incurred while filing the civil case due to the crime.

The Algerian legislator addressed the issue of judicial expenses in Chapter Two of Order 69-79 concerning judicial expenses under the title of judicial expenses in criminal proceedings, which was amended by Executive Decree 95-294 that specifies compensations for certain expenses resulting from the application of judicial procedures and the methods of payment, amended and supplemented by Executive Decree 173-02.

It should be noted that the responsible party for paying judicial expenses should be determined when filing the civil case and the expenses determined at its conclusion, which varies according to the outcome of the conviction or acquittal for the accused, which we will elaborate on as follows:

- Case of conviction of the accused

The text of Article 310 of the Code of Criminal Procedure states that court costs are borne by the accused if convicted, as stated in Article 367 of the same law, which mandates that any judgment of conviction against the accused, and where applicable against the civil liability party, obliges them to pay fees and costs to the state. If there are multiple defendants in the case, whether as perpetrators or accomplices, and a judgment of conviction is issued against them, the costs are divided equally among them or they are jointly liable for them.

- In the case of an acquittal of the accused

If the criminal court rules in favor of the acquittal of the accused in the criminal case, this implicitly means the rejection of the civil compensation claim. Therefore, it is logical not to obligate the accused to pay the costs of the case, only bearing those related to the procedures of the case, such as expert fees or witness summons costs. The accused cannot be obligated to pay the court costs of the case, which are borne by the state or the civil plaintiff who lost their case. Article 369 of the Code of Criminal Procedure states that the civil plaintiff who loses their case is liable for court costs, even in the situations mentioned in Article 246 of the Code. The court may acquit the accused in the criminal aspect and convict them in the civil aspect, thus ordering the accused to pay costs in the civil aspect as well as compensations.

The court costs are collected by the tax administration from the convicted party, as stipulated in Article 597 of the

Code of Criminal Procedure, and are included in the judgment or decision, determined by the investigating judge according to Article 163 of the Code, as well as by the indictment chamber as per Article 199, paragraph 2.

-Guarantees for obtaining compensations in the subject of the subordination claim

The issue of executing the compensation judgment raises an important problem, as practical reality proves that the victim often does not voluntarily receive their financial rights, leading them to request the imposition of physical coercion on the debtor for the amount of compensation as a means of execution, whether it is a criminal penalty issued by the ruling authority or ordered by the public prosecution as an execution authority. The aim of this procedure is to imprison the convicted party under legally specified conditions and for a certain period compared to the amount ruled for, to ensure compliance with the compensation amount. The Algerian legislator has organized the provisions of physical coercion from Article 597 to Article 611 of the Code of Criminal Procedure.

It is worth noting that physical coercion does not extinguish the obligation, which must be followed up with subsequent enforcement methods according to Article 599 of the Code of Criminal Procedure. It is also required that the debtor be financially capable of paying the compensation and refuses to comply with the payment judgment, as stated in Article 603 of the Code of Criminal Procedure.

In addition to the above, Article 609 of the Code of Criminal Procedure allows the public prosecutor to authorize the release of the imprisoned debtor after they have settled their debts. The following article states that the debtor who has not fulfilled the obligations that led to the suspension of the

physical coercion against them is liable for the remaining amounts owed.

Article 611 of the Code of Criminal Procedure clarifies that physical coercion cannot be imposed again for the same debt and due to subsequent judgments for its execution unless these judgments require a longer coercion period than that which has already been executed.

- Conditions for the Criminal Court's Jurisdiction over Civil Claims

We previously defined that for a civil lawsuit filed before the criminal court, the subject must be compensation for direct personal damage arising from the crime that is the subject of the public prosecution; otherwise, jurisdiction will directly fall to the civil court as it holds general jurisdiction over such lawsuits. The dependency referred to here is procedural, not substantive (Mahmoud Mahmoud M., 1988, p. 175).

As a result, for the criminal court to have jurisdiction over the ancillary civil lawsuit, the elements of the cause of action must be established, which are the occurrence of a criminal act punishable by law, its confirmation against the accused, and that it results in damage to an individual or a group of individuals. In their absence, the criminal court becomes incompetent to consider the civil lawsuit, and the court may rule on this of its own accord, as it may also be raised for the first time before the Court of Cassation. (Abu Areef, H., p. 95).

We attempt to elaborate on these elements as follows:

1.3.5. The occurrence of a criminal act punishable by law

Legal scholars agree that the jurisdiction of the criminal court to adjudicate the civil lawsuit is linked to the existence of a criminal lawsuit whose subject involves facts and ac-

tions that are criminalized by law and punishable. (Garraud .R., p. 105).

In the same vein, the Algerian legislator stipulated in the Algerian Code of Criminal Procedure, in Article 2, that for a civil lawsuit to be established before the criminal court, the act must constitute a crime, whether it is a felony, misdemeanor, or violation. Article 72 states that any person harmed by a felony, misdemeanor, or violation may file a civil claim by submitting their complaint to the competent investigating judge. The legislator also required the civil plaintiff, in Article 241, to specify in their report the crime subject to prosecution, which implies that the criminal judge will not consider the lawsuit unless the element of the crime is established and the act attributed to the accused is punishable under the Penal Code.

It is worth noting that the legislator excluded certain acts from the scope of criminalization, which are those mentioned in Articles 39 and 40 of the Penal Code, which are permitted or authorized by law, in addition to cases of legitimate defense of oneself or property, and cases of intervention to protect a person's life or physical safety, as well as preventing harm and injury to homes and their accessories, whether they are barriers, walls, or entrances to houses at night.

1.4. Damage

We attempt to elaborate on the types of damage previously defined in our study of the subject of compensation and its conditions as follows:

1.4.1. Types of damage:

- Material damage

The infringement or violation of a financial interest of the victim protected by law results in a decrease in the victim's financial status, financial loss, or loss of profit. Examples include crimes such as theft, embezzlement, fraud, and destruction of property. Material damage may also affect bodily integrity, preventing a person from earning or incurring medical expenses. (Abu Aref,H., p. 101). It is noteworthy that this type of damage is easily quantifiable and does not pose any practical difficulties.(Al-Shalqani, A.S., 2005, p. 104).

It is worth mentioning that the heirs of the victim have the right to claim compensation that exceeds what the victim suffered, allowing them to seek compensation for what has affected their ancestor and to stand in their place, provided that the latter had filed the civil action before their death. In other cases, the heirs have no recourse to claim compensation except through civil courts. Abdullah Ouhabia, p. 162/163.

- Moral Damage

Moral damage refers to what affects the victim's personal life and social standing, such as honor and reputation, including the publication of images that harm the victim's reputation and dignity, and defamation crimes. It also includes literary damage, which encompasses the exploitation or impersonation of a name, invasion of privacy, and the illegal disclosure of secrets.(Al-Shahhi,M., 2022, p. 101).

1.4.2. Conditions of Damage

From our study of the types of damage, we conclude that Algerian legislation does not exclude any type of damage, regardless of its nature; however, it has established a set of

conditions that must be met for the damage to be considered valid, which are:

- The damage must be direct:

Damage that does not directly result from the crime cannot be claimed for compensation in criminal court.(Larguier J, 2001, p. 116).

This distinguishes the civil action as a condition for its validity before the criminal judge compared to other civil actions. (Al-Marsafawi, H.,p. 131).

- the damage must be personal

The person who has personally suffered from the crime is the only one authorized to file a civil claim for compensation for the damage he has incurred. This is the same position taken by the Algerian legislator as derived from the text of Article 2 of the Code of Criminal Procedure.

- The damage must be real

The legislator stipulated that the claimed damage must be real, taking the form of actual damage that has occurred or the form of future damage that it is expected to happen inevitably. (Abu Amer, M., 1984, p. 579).

1.4.3.The Causal Relationship Between the Criminal Act and the Damage

The damage must result directly from the crime, meaning there is a direct causal relationship between the crime and the damage on which the civil claim is based. As a result, the perpetrator cannot be held liable for indirect damages except before the civil court. (Al-Saeed, K., 2010, p. 270). The Algerian legislator has stipulated this condition in Article 3 of the Code of Criminal Procedure.

2. The Practice of Subsidiary Civil Claims in Criminal Proceedings and Their Methods of Termination

We clarify the conditions for exercising this action and the legally authorized methods for initiating it before the criminal court.

2.1. Conditions for initiating a civil claim before the criminal court:

2.1.1. *The Jurisdiction of the Criminal Court to Hear Public Prosecutions*

The lack of jurisdiction of the court to hear the public prosecution necessarily results in the inadmissibility of the civil claim for compensation for the damage arising from the crime. The objection to the admissibility of the civil claim before the criminal court is a matter of public order as it relates to determining the jurisdiction of criminal courts regarding civil claims. (Raouf O., p. 203).

2.1.2. *Public Prosecution Pending Before the Criminal Court*

For the civil claim to be accepted before the criminal court, the public prosecution must have been initiated and be admissible before this body; otherwise, the civil claim cannot be raised before the criminal court. If the criminal case is terminated for any reason specified in Article 6 of the Code of Criminal Procedure, the civil claim will consequently be rejected before the criminal court, leaving the plaintiff with no option but to resort to civil proceedings. (Abdullah O., pp. 163-164).

2.1.3. *Acceptance of the Public Prosecution*

The inadmissibility of the public prosecution due to violations of the procedures for initiating it, such as the failure to file a complaint by the victim or their representative, or the

request made by a public body or institution, or if permission from the supervising authority for the employee was required by law and not obtained, will consequently result in the inadmissibility of the civil claim before the criminal court (Shamal, A., 2017, p. 129). The public prosecution is also rejected if it is initiated by someone without standing or if the civil plaintiff initiates it against the civil liable party and not against the accused. (Abdullah O., p. 164).

2.2. Methods of Exercising the Subordination Civil Claim Before the Criminal Court

The criminal legislator has allowed the injured party to initiate the public prosecution to claim compensation for the damages incurred as a result of the crime according to Article 01 bis, paragraph two, and the subordination civil claim before the criminal court is initiated by following one of the following methods:

2.2.1. Civil Claim Before the Investigating Judge

The legislator, through Article 72 of the Code of Criminal Procedure, has permitted anyone who has suffered damage from a felony or misdemeanor to file a civil claim by submitting a complaint to the competent investigating judge regionally, provided that the latter informs the other parties to the case of the civil claim in accordance with the provisions of Article 74, paragraph 1 of the Code of Criminal Procedure, while observing the provisions of Articles 75-76-77.

2.2. Direct Summons

The victim may initiate public prosecution by summoning the accused to appear for compensation in cases of abandonment of the family.

Delivery of the child, violation of the sanctity of the home, defamation, and issuing a check without sufficient funds. As for other crimes, it is necessary to obtain License from the Public Prosecutor.(See Article 337 bis of the Code of Criminal Procedure).

2.3. Exercising Civil Action through Intervention

The intervention assumes that the public prosecution has already been initiated by the public prosecutor or by another victim of the crime, so the civil claim is raised during the course of the public prosecution and is conducted either before the investigating authority or before the adjudicating authority.

2.3.1. Establishing as a civil party before the investigating judge

The civil claim may be filed at any time during the investigation process, and the civil claim is not communicated to the other parties in the case, but the investigating judge informs them of it. See the text of Article 74 of the Code of Criminal Procedure.

2.3.2. Establishing as a civil party before the judge

The intervention of the injured party in the civil action before the judge may occur either during the trial session or prior to the session by filing a report with the court clerk, where the plaintiff's residence is designated within the jurisdiction of the court examining the case. The intervenor submits their requests before the prosecution presents its requests, either orally through a report recorded in the session's minutes or by submitting a written request memorandum. See the text of Article 239 of the Code of Criminal Procedure.

It is worth noting that the prosecution cannot be accepted for the first time before the appellate court, in respect of the principle of levels of litigation. See Article 433 of the Code of Criminal Procedure.

Conclusion

From the above, we conclude that the dependency of the civil action on the criminal action is a departure from the general rules of judicial competence, granting the civil plaintiff, who is the victim, the right to file a claim for compensation for the damage resulting from the crime before the criminal court. This exception leads to the following results and recommendations:

- The basis for accepting the civil action before the criminal judiciary achieves more advantages and practical benefits, which are justified by the need to achieve common interests for the victim, the accused, society, and justice.

- The civil action filed before the criminal judiciary, whether through intervention or direct claim, is of a mixed civil and criminal nature due to the dual objective it seeks in terms of compensation and punishment.

- The subject of the subsidiary civil action is compensation in all its forms. It is a condition for the criminal judiciary to have jurisdiction over the civil action that the damage claimed for compensation is personal and directly resulting from the crime for which the criminal action was filed.

- The civil plaintiff initiates their action before the criminal judiciary either by intervening in the criminal case after it has been initiated by the public prosecution or through a direct claim if the public prosecution has failed to initiate it.

Recommendations:

- The Algerian legislature's recognition of the procedural subordination of civil litigation to the Code of Criminal Procedure requires the development of more explanatory legal texts that establish the contours of this exceptional rule, as we find its provisions scattered among the chapters of this law, which makes it difficult to research its merits, especially with the complexity of the field of procedures and the exceptions contained therein.

- Mitigate the excessive use of the rule of postponing the adjudication of the civil case until the criminal case is adjudicated, which harms the legal status of the victim of the crime by setting a specific time frame for this postponement so that its procedures are not prolonged.

- Enabling the civil claimant or the victim of the crime to receive compensation once this fact is proven and then resume other judicial proceedings after that.

- Compensation is subject to the discretionary power of the judge, which may not do justice to the plaintiff with compensation that covers the extent of the damage, and therefore it is necessary to restrict this power by legal texts in a way that protects the injured.

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The concept of biopolitics of according to Michel Foucault

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Abstract

This paper explores the concept of biopolitics as developed by Michel Foucault, examining how modern states exercise power by investing in the biological lives of their populations. Authority, an intrinsic component of human existence, evolves alongside technological and scientific advancement, particularly in the fields of biotechnology and medicine. Foucault's theory reframes power not as a centralized institution, but as a network of relations deeply embedded in social structures. Modern states, through mechanisms of surveillance, discipline, and control, have shifted their focus toward regulating life itself—birth rates, health, disease management, and longevity—thus giving rise to biopower. This paper traces the emergence of biopolitics in the 18th century and examines its integration with liberalism and capitalism, where the human body becomes both a productive force and an object of state investment. In this context, biopolitics aligns with economic imperatives, transforming biological life into a site of political and financial interest. The research investigates how states utilize biopolitical techniques to manage populations, ensure public health, and enhance productivity, ultimately linking human life with the machinery of governance and profit.

Keywords: Power, politics, biopolitics, liberalism, capitalism.

Le concept de biopolitique selon Michel Foucault

Résumé

Cet article explore le concept de biopolitique tel qu'il a été développé par Michel Foucault, en examinant comment les États modernes exercent leur pouvoir en investissant dans la vie biologique de leurs populations. L'autorité, composante intrinsèque de l'existence humaine, évolue parallèlement aux progrès technologiques et scientifiques, en particulier dans les domaines de la biotechnologie et de la médecine. La théorie de Foucault recadre le pouvoir non pas comme une institution centralisée, mais comme un réseau de relations profondément ancrées dans les structures sociales. Les États modernes, par le biais de mécanismes de surveillance, de discipline et de contrôle, ont déplacé leur attention vers la régulation de la vie elle-même - taux de natalité, santé, gestion des maladies et longévité - donnant ainsi naissance au biopouvoir. Cet article retrace l'émergence de la biopolitique au XVIIIe siècle et examine son intégration dans le libéralisme et le capitalisme, où le corps humain devient à la fois une force productive et un objet d'investissement de l'État. Dans ce contexte, la biopolitique s'aligne sur les impératifs économiques, transformant la vie biologique en un lieu d'intérêt politique et financier. La recherche examine comment les États utilisent les techniques biopolitiques pour gérer les populations, garantir la santé publique et améliorer la productivité, en reliant finalement la vie humaine aux mécanismes de la gouvernance et du profit.

Mots-clés : Pouvoir, politique, biopolitique, libéralisme, capitalisme.

Introduction

Authority is an essential aspect of human life. It controls and commands individuals in all areas of their lives, and laws and duties are imposed in society to ensure order. The nature of man's life is determined by authority, making citizens subject to it. With the advancement of science and technology, biotechnology has made it possible for people to achieve happiness, intelligence, and beauty (Arendt & Kohn, 2006). Everyone seeks to advance towards a higher level of human perfection, which has led to the government's increased interest in financing medical projects. This has resulted in biological laboratories aiming to realize the dream of advancing humanity towards political progress. Technological progress has now become a process aimed at advancing governments and countries. Michel Foucault, a French philosopher, highlighted the functioning of the State, which creates a structured society with scientific techniques that pose a threat to human life. This has led to discussions on the treatment of moral problems posed by the intersection of medicine, life sciences, and complex technologies. Foucault founded the idea of biopolitics, which explains how the government invests in the biological element in the context of political and economic progress. The problem of this research is to explain how biopolitics works within the State and how the body is politically invested.

1. What is the definition of power?:

Power is a term that has many synonyms because it refers to anything related to force, possibility, and law. In a general sense, power means the capacity to act or potentiality to produce acts (Arendt & Kohn, 2006). However, power must

reveal itself and manifest in its effects, it cannot remain a possibility or a virtuality. The general sense of authority is conveyed by force, rule, and law, through the presence of a leader who directs others and carries out his orders.

Michel Foucault rejects the general concept that power is just a relationship between a ruler and the governed. He believes this is a narrow view because the meaning of power is much broader (Foucault, 1982). Power, according to Foucault, is not limited to the State or government, but rather extends everywhere. He says "I do not mean power as a set of institutions and apparatuses which guarantee the subjection of citizens in a given state. By power, I am also not extending a mode of subjugation, which, as opposed to violence, would have the form of rule". Foucault does not mean that power is only about domination and submission to the State. Instead, he believes that power is everywhere and comes from all directions (Foucault, 1982).

Power is exercised from countless points in unequal relationships. It's not acquired, taken away, or shared; it's not something we keep or let go of (Foucault, 1982)

Power is not a force that can be applied unilaterally. It is a complex phenomenon that operates through various channels in society, weaving together threads of influence to create a web of authority that extends throughout society. Power is not simply something that is acquired or bestowed upon individuals, but is often exercised through covert means, involving hidden relationships and the participation of many people. It operates as a game of sorts, with multiple players exercising their influence in order to gain and maintain control.

Power relations do not merely prohibit or renew, but also have a productive role. This means that power not only oppresses or does violence, but also produces authoritative

knowledge and methods that people are accustomed to. All knowledge becomes authoritative.

Authority is an ever-present force that cannot be avoided. In fact, attempts to resist authority only serve to reinforce its power. Power exists everywhere, and its roots can be traced back to the very origins of society (Foucault, 1982, p. 76). This is why it cannot be captured or fought. It is present in all institutions and not just in the state apparatus. It cannot be resisted because it is characterized by resistance, and it is also resistance itself.

During modern times, those in power have focused on controlling the human body, turning it into a means of productivity and exploitation. Consequently, the body has become a tool for authoritarian manipulation and a means through which those in power extend their control over society.

Foucault's concept of power sought to examine the impact of authoritarianism on humanity. In his book "Surveillance and Punishing," he paints a harrowing picture of the torture inflicted on citizens, ranging from public physical torture to subtle forms of punishment within the penitentiary system. This system prepares citizens and monitors them without imposing sanctions, thereby controlling their behavior. States use this rule to control all actions in society, ensuring that they work in their favor and according to their desires. (Revel, 2010)

Prison is often seen as a way to discipline individuals and regulate their behavior. This concept represents the expression of authority, which is why Foucault delved into the evolution of punitive methods. He studied the transformation of punishment from a political technology that controlled the body and power relations to more gentle forms of

correction. This method of power involves soft punishment as a means of discipline (White, 1977)

The human body has been subjected to the control of both penal and state institutions and has adapted to serve them. With the advancement of science and technology, governments have become increasingly concerned with investing in the body from a biological perspective. This has led to a significant shift towards the study of biological life, driven by specific motivations and reasons.

Foucault argues that this transformation has historical roots, as biological pressure has never been separate from the political sphere. He calls the state's interest in the biological aspect of humans "biopolitics" for several reasons. State policies are now focused on the vital element of humans as part of economic investment. What is biopolitics, according to Foucault? And where does it appear in state practices?

2- Birth of biopolitics

During the latter half of the 18th century, a new technology came into being which was of a different kind of power, non-disciplinary in nature. This technology did not replace the earlier disciplinary technique, but rather, it complemented and integrated with it. The new technology utilized the existing disciplinary technique as a foundation and effectively embedded itself within it. It operated on a different level, was on another scale, and employed completely different instruments. Consequently, the disciplinary technique was not eliminated; instead, it was altered and used alongside the new technology (White, 1977). The government has displayed a significant interest in laboratory or in vivo biology by involving itself in the lives of human beings. This includes studying how humans live in groups, reproduce, grow, and experience illnesses. Consequently, the govern-

ment has become an attentive observer of these aspects of life.

This has led to the emergence of Power over life, also known as biopower, and the corresponding forms of governmentality that have become the norm (Revel, 2010, p. 203) . Since the 18th century, governments have taken responsibility for managing public health, hygiene, birth rates, longevity and ethnicity (Foucault, 1982, p. 109). The government is interested in understanding the biological processes that impact the population as it relates to achieving economic and production objectives.

These processes include birth rates, death rates, reproduction rates, population fertility, and longevity. Specifically, the government is interested in understanding the impact of these processes on the overall population (Foucault, 1982, p. 160). Various economic and political issues are linked to these processes. The government is responsible for executing technical operations that demand accuracy. They rely on sciences such as statistics, demography, and biology to precisely regulate population distribution, births, and deaths. This allows the government to be cognizant of its population and take necessary measures. For example, a country may want to increase its population or control the demographic surge, as China did by developing birth control technology.

3. The techniques of biopolitics:

- Organize the lives of residents in terms of standard of living.

- the mechanisms of biological power address the body, life, what makes it proliferate, what strengthens the species, its vigor, its capacity to dominate, or its ability to be used.

Health, offspring, race, future of the species, vitality of the social body.(Foucault, 1982, p. 119)

- Take care of the blood and purify the sweat of racism, because racism is linked to the functioning of a State which is obliged to use race, the elimination of races and the purification of the race, to exercise its sovereign power.(Foucault, 1982, p. 171)

- It's important to pay attention to diseases and epidemics. Biopolitics doesn't only focus on the pathology of diseases, but also defines health policies that aim to eradicate diseases through preventive measures and by fostering a culture of cleanliness in the environment. This is significant because if diseases worsen within a society, they can lead to destruction, resulting in significant material and human losses for the state, as well as a depletion of the workforce necessary for its economy to function effectively. Moreover, biopolitics is concerned with ensuring the security of citizens within regions, which is crucial for creating a conducive atmosphere required for effective state organization and peaceful continuation of life. This vital policy has been adopted by major international powers, as is commonly seen in capitalist and liberal systems, to enhance their productivity and progress.

4. The relationship of capitalism and liberalism with biopolitical investment:

The alignment of human accumulation with capital accumulation is made possible through the exercise of biopower in various forms and methodologies. It involves integrating human groups into the spread of productive forces and managing their capabilities in a distributive manner. During this period, it became essential to invest in and safeguard the living body. Biopower facilitates substantial in-

vestments, which can lead to significant financial gains, making it a crucial component of capital.

Capitalism relies on expanding the means of production and actively seeks to amass large labor forces to increase output. This economic system utilizes various human capabilities and employs biopolitical strategies aimed at safeguarding individuals' lives, mitigating risks, and protecting them from diseases to ensure the safety of citizens who work as laborers to drive production and enhance capitalist profits. (Revel, 2010)

According to philosopher Michel Foucault, the concept of biopolitics is closely linked with liberalism. He believed that liberalism is a form of governance that centers around controlling and organizing the population to be successful in a market economy. This approach looks at the power dynamics within society, including how it is distributed and organized (Michel Foucault, 1978, p 15). Biopolitics is a concept that focuses on transforming human life into a platform for exercising liberal authority and generating profit. This approach is primarily rooted in political economy, which prioritizes the support of the technological economy. As a result, funding is directed towards projects that incubate biotechnology research. Notably, liberal countries are currently at the forefront of advanced scientific methods that keep pace with technological advancements.

The primary objective of biopolitics, from this perspective, is to serve the regime by accelerating production within biology labs. This is achieved by leveraging the latest discoveries in genetics and genetic engineering, which have opened numerous avenues for exploring various aspects of humanity. These include delving into the nature of genetic codes, investigating the possibilities of genetic enhancement,

and understanding the human genome. These areas are of immense interest to political economists due to their potential economic and societal implications.

Conclusion

According to Foucault, biopolitics examines state practices within a biological framework. Its focus is on enhancing life for political advancement by regulating the population's life and organizing it through various mechanisms. This involves empowering individuals and obtaining comprehensive knowledge of various aspects of biological life such as birth rates, mortality rates, health policies, diseases, epidemics, and gender dynamics. Capitalism and liberalism uphold the principle of preserving human life, which is synonymous with safeguarding the workforce essential for state investment. These ideologies align with the directives of biopolitics, which promote freedom in labor and advocate for investments in biological research laboratories due to their lucrative nature.

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Sociology in the Era of Modern Technologies and Digitalization

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Abstract

The rapid advancement of modern technologies and digitalization has significantly transformed societies, reshaping social interactions, communication, and institutions. This article explores the impact of digitalization on sociological perspectives, examining changes in social structures, cultural norms, and human behavior. It also highlights the role of artificial intelligence, big data, and social media in shaping contemporary social dynamics. While digitalization offers opportunities for connectivity and information access, it also raises concerns about privacy, digital inequality, and social alienation. The article concludes by discussing the future implications of technological integration in sociology and the challenges it presents for social scientists.

Keywords: Sociology, Digitalization, Modern Technologies, social media, Artificial Intelligence, Big Data, Social Interaction, Privacy, Digital Inequality, Social Change

La sociologie à l'ère des technologies modernes et de la numérisation

Résumé

Le progrès rapide des technologies modernes et de la numérisation a considérablement transformé les sociétés, remodelant les interactions sociales, la communication et les institutions. Cet article explore l'impact de la numérisation sur les perspectives sociologiques, en examinant les changements dans les structures sociales, les normes culturelles et le comportement humain. Il souligne également le rôle de l'intelligence artificielle, du big data et des médias sociaux dans

le façonnement de la dynamique sociale contemporaine. Si la numérisation offre des possibilités de connectivité et d'accès à l'information, elle suscite également des inquiétudes concernant la vie privée, l'inégalité numérique et l'aliénation sociale. L'article conclut en discutant des implications futures de l'intégration technologique en sociologie et des défis qu'elle présente pour les chercheurs en sciences sociales.

Mots-clés : *Sociologie, numérisation, technologies modernes, médias sociaux, intelligence artificielle, Big Data, interaction sociale, vie privée, inégalité numérique, changement social.*

Introduction

The world has witnessed an unprecedented digital transformation over the past few decades, fundamentally altering how societies function. The digital revolution has influenced almost every aspect of life, from economic structures to social relationships. As technology continues to advance, its effects on human interactions, communication methods, and institutional frameworks become more apparent. Sociology, as the study of human behavior and social institutions, must continually evolve to analyze and understand these transformations.

One of the most notable aspects of digitalization is its impact on communication. The rise of social media platforms, instant messaging, and video conferencing tools has revolutionized how people interact. These technologies have made communication more convenient and accessible, bridging geographical gaps and fostering global connectivity. However, they have also led to concerns about superficial relationships, misinformation, and cyberbullying, which influence social interactions in unprecedented ways.

Additionally, digitalization has transformed the way individuals engage with knowledge and information. The internet provides vast amounts of information at the click of a button, enabling instant access to educational resources, research materials, and real-time news updates. While this has democratized access to knowledge, it has also raised questions about information reliability, digital literacy, and the spread of fake news, which significantly shape public opinion and decision-making processes.

Economic structures and labor markets have also undergone significant shifts due to digitalization. Automation,

artificial intelligence, and the gig economy have created new opportunities for employment while simultaneously displacing traditional jobs. The increasing reliance on digital labor platforms has led to concerns about job security, fair wages, and workers' rights. These changes necessitate new sociological inquiries into how technology is reshaping work and economic inequalities.

Another major transformation lies in cultural dynamics and identity formation. Social media has given individuals new avenues for self-expression, shaping how people construct and present their identities online. The concept of digital identity has become an essential topic in sociology, as it affects self-perception, social validation, and even mental health. Digitalization has also influenced cultural exchange, blurring the boundaries between national and global cultures.

Despite its benefits, digitalization has introduced new forms of social stratification and inequality. The digital divide, which separates those who have access to digital technologies from those who do not, exacerbates existing social and economic disparities. In developing countries and marginalized communities, limited access to digital tools hinders education, employment, and civic participation, widening the gap between different social classes.

Given these profound changes, it is crucial to critically examine the sociological implications of digitalization. While technology has brought about remarkable advancements, it has also introduced new social problems that must be addressed. Therefore, the primary concern of this study is to explore how digitalization affects social structures, relationships, and inequalities, while also addressing the challenges it poses for individuals and societies at large.

1. Related Studies

- 1) **Digital Sociology: Origin, Development, and Prospects from a Global Perspective"** (2023) – This article provides a comprehensive overview of digital sociology, highlighting research progress in areas such as labor economy, digital politics, social interactions, identity, social inequality, and methodological innovations.
- 2) **"Digital Sociology: How Digital Technology Contributes to Sociology"** (2017) – This piece discusses the emergence of digital sociology in response to the growing influence of digital data across various sectors, emphasizing its role in transforming societal understanding.
- 3) **"Digitalization and Society: A Sociology of Technology Perspective"** (2019) – This volume examines developments in Big Data, digital security, and the internet from a sociology of technology perspective, emphasizing digitalization as a complex socio-technical process.
- 4) **"A Sociological Agenda for the Tech Age"** (2020) – This article outlines a sociological framework for the digital era, analyzing the production and consumption sides of technology and their societal impacts.
- 5) **"Digitizing Sociology: Continuity and Change in the Internet Era"** (2020) – This study explores how digital sociology analyzes the affordances of technologies in various social spheres and their influence on social relations and structures.
- 6) **"Analysis of Challenges and Opportunities of Sociology in the Digital Society"** (2024) – This study aims to analyze the challenges and opportunities of sociol-

ogy in the digital society in the contemporary era, addressing issues like digital inequality and the disruption of social values.

- 7) **"A Sociological Theory of Media and Digitalization"** (2023) – This work presents a sociological theory that examines digitalization as a medium of social processes, focusing on its role in perception, dissemination, and interaction.
- 8) **"Digitization Drives Transformation of Sociology"** (2024) – This piece explores how the advent of artificial intelligence and digital technologies is transforming the field of sociology, offering insights into future directions.
- 9) **"The Network Society: Social Aspects of New Media"** (1999) by Jan van Dijk – This foundational work examines the social implications of new media and the emerging network society, providing a basis for understanding digitalization's impact on social structures.

These studies offer diverse perspectives on how modern technologies and digitalization influence and reshape various aspects of society, providing a comprehensive understanding of the evolving digital landscape.

2. Impact of Digitalization on Social Institutions

Digitalization has profoundly transformed various social institutions, reshaping the way individuals interact, work, and participate in society. This section explores how modern technologies have influenced key institutions such as education, the economy, politics, family, and healthcare.

2.1. Education: E-learning, MOOCs, and AI in Education

Digitalization has revolutionized the education sector by expanding access to learning resources and transforming traditional teaching methods.

- **E-learning and Online Platforms:** Digital classrooms, virtual lectures, and interactive content have made education more accessible, especially for students in remote areas. Platforms like Coursera, edX, and Udemy offer courses from prestigious institutions to learners worldwide.
- **Massive Open Online Courses (MOOCs):** MOOCs provide free or affordable education, breaking geographical and financial barriers. However, they also raise concerns about student engagement and the quality of online interactions compared to traditional classrooms.
- **Artificial Intelligence (AI) in Education:** AI-powered tools, such as chatbots for student support, adaptive learning platforms, and automated grading systems, personalize learning experiences. However, ethical concerns arise regarding data privacy and the replacement of human teachers with AI-driven systems.

2.2. Economy: Digital Labor, Gig Economy, and Automation

The digital economy has redefined work structures, creating both opportunities and challenges for workers.

- **Rise of Digital Labor:** Freelancing platforms like Upwork and Fiverr have created new job opportunities but have also led to job insecurity and lack of social protections.

- **Gig Economy:** Ride-sharing services (Uber, Bolt) and delivery platforms (DoorDash, Glovo) exemplify how digitalization has facilitated flexible work arrangements. However, gig workers often lack benefits like healthcare and job security.
- **Automation and AI in the Workplace:** Robotics and AI-driven automation have improved efficiency in industries like manufacturing and customer service, but they have also displaced many traditional jobs. The need for digital skills has become essential for workforce adaptation.

2.3. Politics: Social Media Activism, Digital Democracy, and Misinformation

The political landscape has significantly changed with the advent of digital tools, influencing public discourse and governance.

- **Social Media Activism:** Platforms like Twitter, Facebook, and Instagram enable activism movements (e.g., #MeToo, Black Lives Matter) to reach global audiences and mobilize support quickly.
- **Digital Democracy:** E-governance and online voting initiatives have enhanced citizen participation in political decision-making. However, issues like cybersecurity and digital voter suppression remain concerns.
- **Misinformation and Fake News:** The spread of misinformation, deepfake videos, and algorithm-driven content manipulation pose serious threats to democratic institutions, often influencing elections and public opinion.

2.4. Family: Changing Family Dynamics Due to Technology (Virtual Parenting)

Digitalization has reshaped traditional family structures, affecting communication patterns, parenting, and relationships.

- **Virtual Parenting:** Parents use digital tools (e.g., video calls, parenting apps) to stay connected with their children, especially in cases of long-distance parenting due to migration or work.
- **Changing Communication:** Families rely on digital platforms (WhatsApp, Zoom) for maintaining relationships, but excessive screen time can lead to reduced face-to-face interactions.
- **Challenges of Digital Parenting:** Monitoring children's online activities has become a new responsibility for parents, raising concerns about cyberbullying, screen addiction, and exposure to inappropriate content.

2.5. Healthcare: Telemedicine and Digital Health Inequalities

Technology has transformed healthcare services, making medical assistance more accessible while also raising concerns about disparities in healthcare access.

- **Telemedicine and Online Consultations:** Virtual healthcare platforms allow patients to consult doctors remotely, reducing the need for physical hospital visits. This was especially crucial during the COVID-19 pandemic.
- **Wearable Technology and Health Monitoring:** Devices like smartwatches and fitness trackers help in-

dividuals monitor their health metrics, leading to early diagnosis and prevention of diseases.

- **Digital Health Inequalities:** While digital healthcare solutions improve medical accessibility, marginalized populations (e.g., rural communities, elderly individuals) may struggle due to lack of internet access, digital literacy, or affordability of technology.

The digitalization of social institutions has created new opportunities while also presenting significant challenges. Education has become more accessible but requires adaptation to new learning models. The economy benefits from digital work structures but faces issues related to labor rights. Politics have been democratized through digital activism, yet misinformation poses a major threat. Families navigate both positive and negative aspects of virtual interactions, and healthcare has improved through digital tools, though inequalities persist. Addressing these challenges requires a balanced approach that maximizes the benefits of digitalization while mitigating its risks.

2.6. Artificial Intelligence and Big Data in Sociology

The integration of **Artificial Intelligence (AI)** and **Big Data** into sociology has transformed the way researchers analyze and interpret social patterns, behaviors, and institutions. AI enables the rapid processing of vast amounts of social data, while big data techniques allow sociologists to uncover trends that were previously difficult to identify. However, these advancements also introduce ethical concerns, particularly regarding bias, privacy, and decision-making processes.

3. AI's Influence on Social Research and Predictive Analytics

AI and predictive analytics have revolutionized **social research** by providing new methods for data collection, pattern recognition, and forecasting social trends. These advancements allow sociologists to move beyond traditional research techniques and into real-time, data-driven insights.

3.1. Enhancing Data Collection and Analysis

- AI enables sociologists to **analyze massive datasets** from social media, surveys, and public records, helping to understand social interactions and trends.
- **Natural Language Processing (NLP)** tools analyze text data from online platforms, providing insights into public opinion, political discourse, and consumer behavior.
- AI-powered **sentiment analysis** helps track emotional trends across populations by examining texts, tweets, and news articles.

3.2. Predictive Analytics in Social Behavior

- AI can **predict societal trends**, such as crime rates, migration patterns, and unemployment spikes, based on historical data.
- Predictive models help policymakers and urban planners **anticipate social problems** and develop preventive measures (e.g., predicting areas at risk for social unrest).
- AI-powered simulations allow sociologists to **model potential future social scenarios** based on current data, improving long-term social planning.

3.3. Challenges in AI-Driven Social Research

- AI models require **high-quality data**, but social data is often incomplete, biased, or misinterpreted.
- **Interpretability issues** arise because AI algorithms function as "black boxes," making it difficult to understand how decisions are reached.
- The use of AI in social research raises **questions about human agency**, as reliance on algorithms may reduce the role of sociologists in drawing conclusions.

4. Ethical Concerns in AI-Driven Decision-Making

While AI brings efficiency and accuracy to sociological studies, ethical concerns arise regarding how decisions are made and their societal impact.

4.1.. Privacy and Surveillance

- AI models often rely on **personal data** collected from social media, online transactions, and government databases. The use of this data without consent raises concerns about individual privacy.
- Governments and corporations increasingly use AI for **mass surveillance**, tracking public behavior through facial recognition and online activity monitoring.
- **Data breaches** and hacking of AI-driven databases pose serious risks to personal security and confidentiality.

4.2.. Accountability and Transparency

- AI decision-making lacks **human oversight**, leading to accountability gaps in cases where algorithms make biased or harmful decisions.

- Many AI models are built using **proprietary algorithms**, preventing researchers and policymakers from understanding their underlying logic.
- Sociologists and AI developers must work together to **increase transparency** by ensuring that AI models are explainable and auditable.

4.3. Automation of Social Services

- AI is increasingly used in **public policy**, criminal justice, and employment decisions, raising concerns about fairness.
- Automated hiring systems, predictive policing, and AI-driven welfare assessments can **reinforce discrimination** if not carefully monitored.
- Ethical AI frameworks are needed to **ensure fair and unbiased decision-making** in public services.

5. Algorithmic Bias and Its Impact on Social Groups

AI algorithms are only as good as the data they are trained on. If historical data reflects **social inequalities**, AI models may perpetuate or even amplify biases, disproportionately affecting marginalized groups.

5.1. Discriminatory AI in Hiring and Employment

- AI-powered **resume screening** often favors candidates from privileged backgrounds, excluding those from underrepresented communities.
- Bias in AI-driven **performance evaluations** can disadvantage employees based on gender, race, or socioeconomic status.
- Efforts are needed to **train AI models on diverse datasets** to reduce workplace discrimination.

5.2.. AI and Racial Profiling in Law Enforcement

- Predictive policing algorithms have been shown to **disproportionately target minority communities**, reinforcing systemic biases in law enforcement.
- Facial recognition technology has a higher **error rate for non-white individuals**, leading to wrongful arrests and misidentifications.
- Governments must implement **strict regulations** to prevent AI from being used for racial profiling and discriminatory policing.

5.3.. Bias in Healthcare and Social Services

- AI models used in healthcare decision-making may **favor wealthy patients**, as they are often trained on data from privileged healthcare systems.
- **Insurance and credit risk assessments** powered by AI can unfairly disadvantage lower-income individuals.
- To address these issues, sociologists must work with AI developers to create **inclusive, bias-free datasets**.

Future Directions for Sociology in the Digital Age

The rise of digital technologies has transformed the field of sociology, leading to new research approaches and methodologies. To stay relevant, sociology must adapt to the **digital age**, incorporating big data analysis, AI-driven research, and ethical considerations into its framework.

6. The Need for Digital Sociology as a Sub-Discipline

Traditional sociology has focused on face-to-face interactions and historical data, but the **digital transformation** of society demands a new approach.

6.1. What is Digital Sociology?

- Digital sociology focuses on the study of **online interactions, social media behaviors, and AI-driven social changes**.
- It examines **how digital platforms shape identities, political movements, and economic structures**.

6.2. Why is Digital Sociology Important?

- The internet has become a **primary space for social interactions**, making digital sociology essential for understanding modern social life.
- Digital sociology provides insights into **emerging social phenomena**, such as online radicalization, cyberbullying, and digital labor exploitation

7. New Research Methods (Big Data Analysis, Digital Ethnography)

Sociologists must adopt **new methodologies** to analyze digital interactions effectively.

7.1. Big Data in Sociology

- Large-scale data analysis allows sociologists to examine social patterns **in real time**, improving the accuracy of predictions.
- Big data research is useful for studying **online activism, misinformation trends, and digital consumption patterns**.

7.2. Digital Ethnography

- Traditional ethnography relies on **physical observations**, while digital ethnography studies **virtual communities and online behaviors**.

- Researchers use **social media analytics, forums, and digital interviews** to study digital cultures.

8. Addressing Ethical Challenges in Digital Sociology

As sociology enters the digital realm, researchers must consider ethical implications.

8.1. Digital Privacy and Data Protection

- Sociologists must establish **clear ethical guidelines** when collecting social media data.
- Research participants should be informed about **how their data will be used** in digital studies.

8.2. Combating Algorithmic Bias

- Digital sociology should play a role in **developing fair and unbiased AI models**.
- Researchers must work with policymakers to ensure **AI ethics are integrated into legislation**.

8.3. Ensuring Transparency in Digital Research

- Researchers should **document and disclose their methodologies** when analyzing digital data.
- Open-access data and collaboration between sociologists and AI developers will improve **ethical standards** in the field

The integration of AI and big data into sociology presents **both opportunities and challenges**. While AI enhances predictive analytics and social research, it also raises ethical concerns regarding **privacy, bias, and decision-making transparency**. The future of sociology lies in the development of **digital sociology**, which will require new research methods, ethical frameworks, and interdisciplinary collabo-

ration. By addressing these challenges, sociology can remain a relevant and impactful discipline in the digital era.

9. Recommendations and Implications

The integration of artificial intelligence (AI), big data, and digital technologies into sociology presents both opportunities and challenges. Based on the discussion of AI's role in social research, ethical concerns, algorithmic bias, and the future of digital sociology, the following **12 recommendations and implications** are proposed:

9.1. Recommendations

1. Promote Digital Sociology as a Specialized Field

- Universities and research institutions should establish **dedicated digital sociology programs** to train sociologists in AI, big data analysis, and digital ethnography.
- Encourage interdisciplinary collaboration between **sociologists, data scientists, and AI experts** to develop ethical and effective research methodologies.

2. Implement Ethical Guidelines for AI in Social Research

- Sociologists should adopt **transparent AI models** that provide clear explanations for their predictions and analyses.
- Develop **ethical codes of conduct** for handling digital data, ensuring privacy protection and informed consent in social research.

3. Address Algorithmic Bias and Discrimination

- AI developers must **train algorithms on diverse and representative datasets** to reduce bias in automated decision-making.

- Governments should **regulate AI use in hiring, policing, and social services** to prevent discrimination against marginalized communities.

4. Increase Transparency and Accountability in AI Decision-Making

- Require AI companies and institutions to **publish their algorithms** and decision-making criteria to allow for independent audits.
- Establish **AI ethics boards** to oversee how AI influences social policies and public administration.

5. Strengthen Digital Literacy and AI Awareness in Society

- Introduce **digital literacy programs** to help individuals understand how AI systems work and how they impact daily life.
- Encourage **critical thinking skills** to combat misinformation, algorithmic manipulation, and online biases.

6. Enhance Regulations on Data Privacy and Security

- Strengthen **data protection laws** to safeguard individuals from mass surveillance and unauthorized data collection.
- Encourage companies to implement **privacy-by-design AI models** that prioritize user confidentiality.

7. Foster Fair and Inclusive AI Development

- AI research should prioritize **equitable access to technology** for all social groups, ensuring that digital advancements benefit both privileged and underprivileged populations.
- Governments should provide **funding for AI-driven social research** that addresses global challenges, such as inequality and discrimination.

8. Expand Access to Digital Research Methods

- Sociology departments should integrate **big data analytics, computational social science, and machine learning** into research training.
- Make **open-source AI tools** and digital research platforms more accessible to researchers worldwide.

9. Encourage Public Participation in AI and Data Governance

- Policymakers should engage **citizens in discussions on AI ethics and data governance**, ensuring public concerns are addressed.
- Promote **community-based AI initiatives** that allow individuals to shape AI development in ways that align with societal needs.

10. Develop Policies for Fair AI Use in Public Services

- AI-driven decision-making in **welfare programs, law enforcement, and education** should be regularly reviewed to prevent systemic inequalities.
- Governments should establish **AI ethics task forces** to oversee how digitalization affects public institutions.

11. Support Multidisciplinary Research in AI and Sociology

- Encourage **collaboration between social scientists, AI developers, legal experts, and policymakers** to create balanced AI policies.
- Fund research initiatives that explore **how AI influences social structures, power dynamics, and individual agency**.

12. Prepare for Future Ethical Challenges in Digital Sociology

- Establish proactive strategies for **dealing with emerging AI risks**, such as deepfake misinformation, automated discrimination, and the digital divide.
- Encourage **continuous ethical reassessment** as AI technologies evolve, ensuring that sociological research remains relevant and responsible.

9.2. Implications

1. Reshaping Sociological Research

The rise of AI and big data requires a **fundamental shift in sociological methodologies**, moving away from traditional surveys and interviews toward **digital and computational techniques**.

2. Greater Responsibility for Sociologists

Sociologists must take on the role of **AI ethics advocates**, ensuring that technological advancements align with societal values and do not exacerbate social inequalities.

3. Expanding the Role of Sociology in Public Policy

Policymakers will increasingly rely on **AI-driven sociological insights** to shape policies in areas such as education, healthcare, and governance. This increases the **influence of sociologists** in decision-making processes.

4. Ethical and Legal Challenges in AI Regulation

As AI continues to evolve, governments and institutions will need to **navigate complex ethical and legal challenges**, balancing technological innovation with social justice and fairness.

5. The Digital Divide and Social Inequality

Without proper regulation, **AI may reinforce existing social inequalities**, making it crucial to develop **inclusive digital**

policies that ensure equitable access to technology and digital education.

6. Transformation of Social Institutions

AI and big data are changing how **families, businesses, and governments** operate, requiring institutions to **adapt to digital transformation** while preserving social cohesion and ethical integrity.

The integration of AI and big data into sociology presents **unprecedented opportunities** for social research and policymaking. However, these advancements also introduce **significant ethical, legal, and social challenges** that require proactive solutions. By implementing **ethical AI policies, strengthening digital literacy, and promoting transparency**, sociologists can ensure that digital technologies serve the greater good while minimizing harm to vulnerable populations. The future of sociology depends on its ability to **adapt to digital realities** while upholding core social values of fairness, inclusion, and human dignity.

Conclusion

The rapid digital transformation of society has significantly impacted the field of sociology, creating new opportunities and challenges in understanding human behavior, social structures, and institutional dynamics. The integration of **artificial intelligence (AI) and big data** into social research has provided unprecedented access to vast amounts of information, enabling sociologists to analyze patterns, predict social trends, and contribute to policy development in ways that were previously unimaginable. At the same time, this technological shift raises **critical ethical concerns**, including

issues of privacy, algorithmic bias, and the accountability of AI-driven decision-making. These challenges necessitate a re-evaluation of traditional sociological theories and methods, ensuring that the discipline remains relevant in the digital era.

One of the most profound changes brought about by digitalization is the **redefinition of social institutions**, including education, the economy, politics, family, and healthcare. The rise of **e-learning, MOOCs, and AI-driven educational tools** has democratized access to knowledge but has also exacerbated digital divides between different socioeconomic groups. The **gig economy and automation** have transformed labor markets, raising concerns about job security, fair wages, and worker rights in an increasingly digital world. In politics, the widespread use of **social media activism, digital democracy, and misinformation** has reshaped civic engagement, offering new avenues for political participation while also posing risks to democratic integrity. Families have also undergone significant transformations, with digital communication tools altering traditional family dynamics and virtual parenting becoming more common. Likewise, healthcare has been revolutionized through **telemedicine and AI-driven diagnostics**, improving access to medical services but also creating disparities in digital healthcare accessibility.

The ethical implications of AI in sociology demand serious consideration, particularly regarding **algorithmic bias and discrimination**. AI models are often trained on historical data that may contain inherent social biases, leading to unfair treatment of marginalized communities in areas such as hiring, law enforcement, and access to financial resources. The lack of transparency in AI decision-making processes further exacerbates these challenges, making it difficult to

hold institutions accountable for the unintended consequences of automated systems. To address these concerns, it is imperative that sociologists, AI developers, and policy-makers collaborate in establishing **ethical frameworks and regulatory guidelines** that promote fairness, inclusivity, and transparency in AI applications. Digital literacy programs should also be widely implemented to educate individuals about **the risks and opportunities** associated with AI and big data, ensuring that people can engage critically with digital technologies in their daily lives.

The emergence of **digital sociology as a specialized sub-discipline** highlights the need for new research methodologies that can effectively capture and analyze digital interactions. Traditional sociological methods, such as surveys and ethnography, must be supplemented with **big data analytics, computational modeling, and digital ethnography** to provide deeper insights into online behaviors, digital identities, and virtual communities. The study of digital sociology not only enhances our understanding of how people interact in digital spaces but also informs policies aimed at addressing issues such as cyberbullying, online radicalization, and the spread of misinformation. Moreover, it is essential for researchers to ensure that their methodologies adhere to ethical standards, particularly in the collection and use of **sensitive digital data** from social media and other online platforms.

Looking toward the future, the integration of AI into sociology presents **both opportunities and responsibilities**. While AI can provide powerful tools for analyzing social dynamics and improving policymaking, it is crucial to ensure that these technologies are used ethically and equitably. Governments must enact policies that **protect digital rights**,

ensure fair AI applications, and prevent technology-driven inequalities. Sociologists, in turn, must take an active role in shaping AI policies and advocating for the **responsible development and deployment of digital technologies.** Without these proactive measures, the benefits of AI in sociology could be overshadowed by its potential to deepen social divides and perpetuate systemic discrimination.

In conclusion, the digital revolution has undeniably transformed the landscape of sociology, offering new perspectives on social structures, behaviors, and institutions. However, these advancements come with **significant ethical, methodological, and policy challenges** that must be carefully managed. The future of sociology in the digital age will depend on **its ability to adapt** while remaining committed to principles of social justice, equality, and human dignity. By embracing interdisciplinary collaboration, ethical AI development, and innovative research methods, sociologists can play a crucial role in shaping a digital future that is inclusive, fair, and socially responsible.

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Methodical Applications of Quantum Physics to the Classical Arabic Syntactic Course - Readings on the New Arabic Linguistic Conception -

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Abstract:

This modest academic research can provide new Arabic linguistic visions in the interpretation of Arabic linguistic material, which concerns some classical syntactic themes, including Horouf el-Maani, because it is based primarily on the projections of quantum philosophy on the ancient Arabic syntactic course, with an interdisciplinary linguistic approach that makes quantum physical methodological procedures a flexible tool at the service of modern Arabic linguistic course, to move it from the circle of humanities to the circle of exact sciences, in terms of organic and methodological treatment, and to open new horizons of Arabic linguistic research, based on the projections of precise scientific methods on ancient and modern linguistic themes. in a bold attempt to analyze the constituent elements of its linguistic subjects and explain its phenomena in a way different from what was previously presented in the ancient Arabic linguistic course in terms of study and approach, and to interpret it with what it provides the sources of modern science, including a strict methodology and sound logic, and can be interpreted even when there is no clear evidence, with the presence of logical and solid clues. This modern interdisciplinary linguistic conception is not necessarily an epistemic break with classical Arabic linguistic studies, as much as it represents a civilizational continuity between two linguistic generations, and as much as it represents an obsolescence in the linguistic visions presented in linguistic theory, from Al-Khalil to Sibawayh to Ibn Jinni.

Keywords: Arabic linguistics; interdisciplinarity; quantum; phonology; function; syntax; signification; amma

Applications méthodiques de la physique quantique au cours classique de syntaxe arabe

- Lectures sur la nouvelle conception linguistique de l'arabe -

Résumé :

Cette modeste recherche académique peut fournir de nouvelles visions linguistiques arabes dans l'interprétation du matériel linguistique arabe, qui concerne certains thèmes syntaxiques classiques, y compris Horouf el-Maani, parce qu'elle est basée principalement sur les projections de la philosophie quantique sur l'ancien cours syntaxique arabe, avec une approche linguistique interdisciplinaire qui fait des procédures méthodologiques de la physique quantique un outil flexible au service du cours linguistique arabe moderne, pour le faire passer du cercle des sciences humaines au cercle des sciences exactes, en termes de traitement organique et méthodologique, et pour ouvrir de nouveaux horizons à la recherche linguistique arabe, basée sur les projections des méthodes scientifiques précises sur les thèmes linguistiques anciens et modernes. Cette conception linguistique moderne et interdisciplinaire est une tentative audacieuse d'analyser les éléments constitutifs de ses sujets linguistiques et d'expliquer ses phénomènes d'une manière différente de ce qui a été présenté auparavant dans le cours de langue arabe ancienne en termes d'étude et d'approche, et de l'interpréter avec ce qu'elle fournit les sources de la science moderne, y compris une méthodologie stricte et une logique solide, et peut être interprétée même lorsqu'il n'y a pas de preuves claires, avec la présence d'indices logiques et solides. Cette conception linguistique interdisciplinaire moderne n'est pas nécessairement une rupture épistémique avec les études linguistiques arabes classiques, autant qu'elle représente une continuité civilisationnelle entre deux générations linguistiques, et autant qu'elle représente une obsolescence dans les visions linguistiques présentées dans la théorie linguistique, d'Al-Khalil à Sibawayh à Ibn Jinni.

Mots-clés : linguistique arabe ; interdisciplinarité ; quantum ; phonologie ; fonction ; syntaxe ; signification ; amma

Introduction

An Arab linguistic researcher may find, in a careful diachronic reading, that classical Arabic linguistic studies were largely based on the morphemic aspect, aligned with the lexical linguistic elements "les monèmes arabes" (noun, verb, and particle) in the conception of André Martinet. This is clearly evident in grammatical studies that organized their topics according to this classification, with their explanations and interpretations centered on the linguistic word, without delving into the lower linguistic components "les formants linguistiques finales," which are quantitatively fewer, particularly the Arabic phonological elements "les éléments phonologiques arabes," starting with the phoneme in both its consonantal and vocalic aspects.

While some early indications of critique toward this approach appeared in the classical morphological course "le cours morphologique arabe classique," which relied on the Arabic letter to explain morphological phenomena – a part of the Arabic morphemic elements "les éléments morphologiques arabes" – especially in topics like substitution, transformation, assimilation, similarity, and dissimilarity, it treated the Arabic letter in isolation from its quantitative physical properties, such as airflow from the lungs, point of articulation, and movement dynamics. These precise physical descriptions hold the key to understanding linguistic phenomena, as they relate more to the features resembling the letter than the letter itself, forming the "final quantitative counterparts" of the Arabic letter.

Even though further critiques came through the Arabic phonetic course "le cours phonétique arabe," particularly in the phonetic-semantic discussions recorded by Sibawayh in

parts of his *Kitab*, by Ibn Jinni in *Al-Khasa'is*, and by other Arab linguists in this refined and noble field, they remain relatively limited. This is because they did not adopt the lower and quantitatively fewer phonological elements as a foundation for analyzing Arabic linguistic phenomena as a whole, nor did they use them consistently to explain or interpret phenomena when phonological explanations were insufficient. This was neither a focus nor practically accessible at the time. Ibn Jinni (d. 392 AH) might be an exception, as his methodology in addressing Arabic linguistic issues — including grammatical, morphological, and even literary and artistic — employed procedural Arabic phonological tools to interpret grammatical and morphological subjects, proposing interpretations widely accepted due to their rigorous methodology and sound logic.

Since language represents the human voice and man is the physical, natural image in terms of his organic composition, alongside psychological, spiritual, intellectual, and cognitive characteristics, language may follow the path of human composition. Thus, linguistic components would align naturally and physically with the linguistic elements, which are then linked to communicative, social, psychological, and cultural functions — linguistic phenomena governed more by function than substance. This applies to all human tongues, including Arabic. Therefore, the path to explaining and interpreting linguistic phenomena and proposing interpretations — especially when direct evidence is lacking — aligns with academic methodologies used to describe human physiology, especially those dominated by quantum physics and parallel sciences like natural sciences, mathematics, chemistry, etc. This suggests that quantum physical philosophy could be a procedural approach to handling Arabic linguistic material, as it looks at the lesser and

more quantifiable linguistic elements with their physical and mechanical properties to interpret grammatical and morphological materials and related linguistic content. Such interpretation, preceded by clear analysis and sufficient explanation of physical and mechanical characteristics, yields richer explanations than those found in classical linguistic studies – due to the advancement of modern science and technology, which makes this approach not only logical but necessary.

This pursuit does not intend to declare an epistemological break with classical Arabic linguistic heritage, with all its strengths and weaknesses. Rather, it represents a civilizational continuity between two generations of linguistic scholarship. Al-Khalil initiated this with a linguistic-mathematical approach in *Kitab al-'Ayn* and *Al-Jumal fi al-Nahw*, a tradition continued by his student Sibawayh, who viewed Arabic linguistic phenomena as relative rather than absolute. Many grammarians followed this path until linguistic leadership reached Ibn Jinni, who introduced a specialized approach to interpreting Arabic linguistic and literary phenomena by focusing on the lowest levels of linguistic elements, even if not considered part of those levels. His methodology resembles quantitative linguistic interpretation, reflecting the scientific capabilities of his time.

All this should encourage the modern Arab linguistic researcher to elevate Arabic linguistic studies from their place among the humanities – which have benefited more from linguistic studies than vice versa – into the realm of the exact sciences, which is their rightful domain. This transition is justified by the nature of linguistic material and its compositional elements, the analytical methodologies that deconstruct it, and the application of formal mathematical logic –

long present in this field — particularly in the foundational linguistic principles established by Al-Khalil and expanded by Sibawayh, which aim to find logical "images" that match their syntactic "antecedents."

1. The Research Problem:

The reader of this presentation might encounter some academic ambiguity, necessitating clarification due to the unfamiliarity of the proposed interconnection between linguistics and quantum physical philosophy. Many scholars view these as two distinct fields — one among the humanities and the other within the precise sciences. Thus, questions arise regarding the academic legitimacy and efficacy of applying quantum philosophical projections to Arabic linguistics:

1. Some Arab linguists may see ambiguity in the proposed connection between linguistics and quantum physical philosophy. What justifies this academic association and the philosophical projections onto linguistic inquiry?
2. Even if one accepts this link, what is the level of interdisciplinary efficiency achieved? How beneficial is it for Arabic linguistic studies?
3. What is the degree of responsiveness of classical linguistic topics — especially classical Arabic grammar — to this methodological projection?
4. Does this inter-disciplinary link facilitate civilizational knowledge continuity between generations of Arab linguists?
5. Can it open new theoretical linguistic horizons while preserving Arabic linguistic specificity?
6. Does it establish an epistemological link between Ibn Jinni's linguistic thought and the emerging quantita-

tive linguistic theory derived from this interdisciplinary connection?

7. Finally, can it lead to theoretical advances in modern Arab linguistics without relying on Western linguistic practice?

2. Regarding: “cvc-cvv” (2-3):

This structure entails condition, detail, and emphasis. It features three linguistic forms:

1. With a fatha and tashdid (gemination), which is the most common and dominant form.
2. With the first *mīm* changed to *yā'* for ease and to avoid the heaviness of gemination — as in the line of Ibn Abi Rabi'ah:
"She saw a man, ayma — when the sun appears, he shines; and ayma in the evening, he's present."
3. As a dialectal variant of *immā*.

It is possible that *ammā* is a compound of (أ + م), with *an* being the lightened form of *anna* for emphasis, thus conveying assertiveness, possibly even conditionality. Or it may be composed of (أ + م), based on the vocalized reading of *immā*. Though this view is weaker, it's plausible enough to consider. In this case, *in* would be the lightened form of *inna*, also expressing emphasis and possibly condition — if *in* is considered a conditional particle. Since this phonological composition supports both possibilities, the indicators of emphasis and condition are strengthened accordingly.

Perhaps what explains both of them is what the syllabic closure in the first segment [(أ):(3)"cvc"] indicates — the connotation of cutting, closing, and sealing; such as what is found among the signs of emphasis in severing suspicion with certainty, and sealing the domain of doubt in the inci-

dents of matters. A similar thing occurs in the conditionality, in that the syllabic closure refers to the meaning of cutting and its indicators, due to the interruption of indication of condition in what is concluded between the two parties – both in reality and supposition – so that neither of them breaches what was set as a condition, which became a restriction leading both parties and restraining them from surpassing what was agreed upon. As for the segmental openness in the second [(ما):(2)"cvv"], it may be explained by what the indication suggests – openness and expansiveness – that attach the meaning of elaboration in the context where it comes with “amma,” thereby exceeding what was previously limited in the immersion of a thing in one meaning after it was segmented and its parts were separated, so that elaboration emerges from it, expanding it with specification and textual declaration, and its counterparts from the signs of clarification. Thus, the syllabic construction in “amma” may imply that the explosive glottal hamzah or the first syllabic closure [(ان):(3)"cvc"] refer to the connotations of emphasis and conditionality, by what it suggests from the quantitative physical properties – which are characteristics of the ascending breath – and the mechanical kinetic properties that pertain to the phoneme’s homology at its point of articulation, and the movement it takes in its pronunciation. The syllable does not depart from what concerns the phoneme in terms of quantitative physical and mechanical kinetic characteristics...

It has become clear that the phonemic closure that attaches to the “nun” at the end of the closed syllable is what seals it; it aligns with the connotation of cutting, closing, and sealing in what the syllable suggests of emphasis and conditionality – both being indicators of confinement, severance, and their counterparts. In this way, the second syllable

[(لأ):(2)"cvv"] may suggest the grammatical connotation of elaboration, by what it suggests of quantitative physical and mechanical kinetic characteristics of expansiveness and length, thereby matching the indication of increasing elaboration in what the context brings, after the thing had been limited to one meaning – as emphasis and conditionality were confined in the first syllable...

As for the three grammatical forms of “amma,” they are interpreted by what grammarians have observed of syntactic and semantic properties, and their counterparts in phonetic, syllabic, structural, and phonemic aspects were as follows:

First case: a conditional particle:

What may explain the condition of necessitating the presence of the “fa” after it, when “amma” denotes conditionality; such as in His saying, Exalted be He: (Quranic verse), is the phonemic lightness of the “fa” that increases the connection of the answer to its condition, being at the beginning of the response. It has become clear that the “fa” is among the “thalaq” phonemes through which Arabic words that exceed the trilateral root are lightened, due to the “fa” carrying phonemic clarity and purity, enabling it for phonetic fluidity which enters phonological constructions, thus producing phonological lightness. This does not differ in grammatical constructions from lexical units of lesser rank. What may further support this interpretation is the assumption that the “waw” could be placed instead of the “fa” in the answer to the condition, whereby the phonological heaviness of the “waw” becomes evident compared to the lightness of the “fa.” Grammarians have stated that the “fa” at the beginning of the answer is not for conjunction, as it serves phonological consistency and thus linguistic consistency at the level of

syntactic and textual constructions. If it were for conjunction — with “waw” being the principal letter for conjunction — it could have taken its place, as it did in numerous instances; among them is the saying:

"Stop and let us weep over the memory of a beloved and a dwelling, ÷ At the low ground between Dakhol and Hawmal."

If the “fa” were for conjunction, it would not be valid to enter upon the predicate, for one does not conjoin the predicate to its initiation; similar to this in assuming the “fa” as redundant — if it were so, it would be permissible to dispense with it. However, this is generally not accepted by grammarians in the case of its entering the answer, except in cases of poetic necessity — in classical grammatical analysis — such as in the line:

"As for fighting — there is no fighting with you ÷ But rather marching through the ranks of the processions."

It was previously shown that the “fa” is among the “thalaq” phonemes with phonetic lightness, which explains the ease of omitting it without dispensing with it. This may be indicated by its evocation in the tone that dominates the structure containing it even if it is not pronounced. The peak of intonation occurs when uttering “la” in “la qital,” to allude to it upon its omission. If it were not deleted, the “fa” would have taken the peak of intonation, which traverses the structure in which it is contained, due to the tone carrying quantitative physical and mechanical kinetic properties that allude to the “fa” at the beginning of the answer even if not explicitly mentioned. Nonetheless, the phonological aspect invoked in this linguistic structure functions as an explicit mention in the place of deletion. The same applies to the line by Ka'b ibn Malik:

"Whoever does good, God will reward him ÷ And evil with evil, God does the same."

Where the "fa" with phonological lightness and its phonemic properties is omitted — one of the clearest Arabic phonemes with the least quantitative properties in ascending breath and the mechanical kinetic properties at the bilabial limit, explaining its precedence at the beginning of the answer and the ease of omitting it without neglecting it — the matter is the same in considering it a semantic particle [(fa)(1)"cv"] and a single syllable, which supports its omission in linguistic structure, with indication of its presence by the tonal element when invoked in the intonation that traverses the linguistic structure, assuming it included the "fa," so that the peak of intonation occurs on the word "yashkuraha" that follows the "fa" after it was expected before its omission. The physical and kinetic properties of the tone enable the implication of the deleted "fa".

The second condition: A letter of specification (حرف تفصيل):

A letter of specification elaborates on a general statement, which is typically the case. An example of this is the saying of Allah (Y):

"... and the ones who believe and do righteous deeds, they will be in the Garden of Bliss."

This is a detailed explanation of His general statement:

"... those who believe and do righteous deeds, and the ones who disbelieve and reject the truth, they will face their reward accordingly."

In some cases, the specification replaces the need to repeat the "amma" (as for), by mentioning one of the two specified categories and leaving out the other, such as in the verse: *"And as for those who disbelieve, they will have such and such..."*

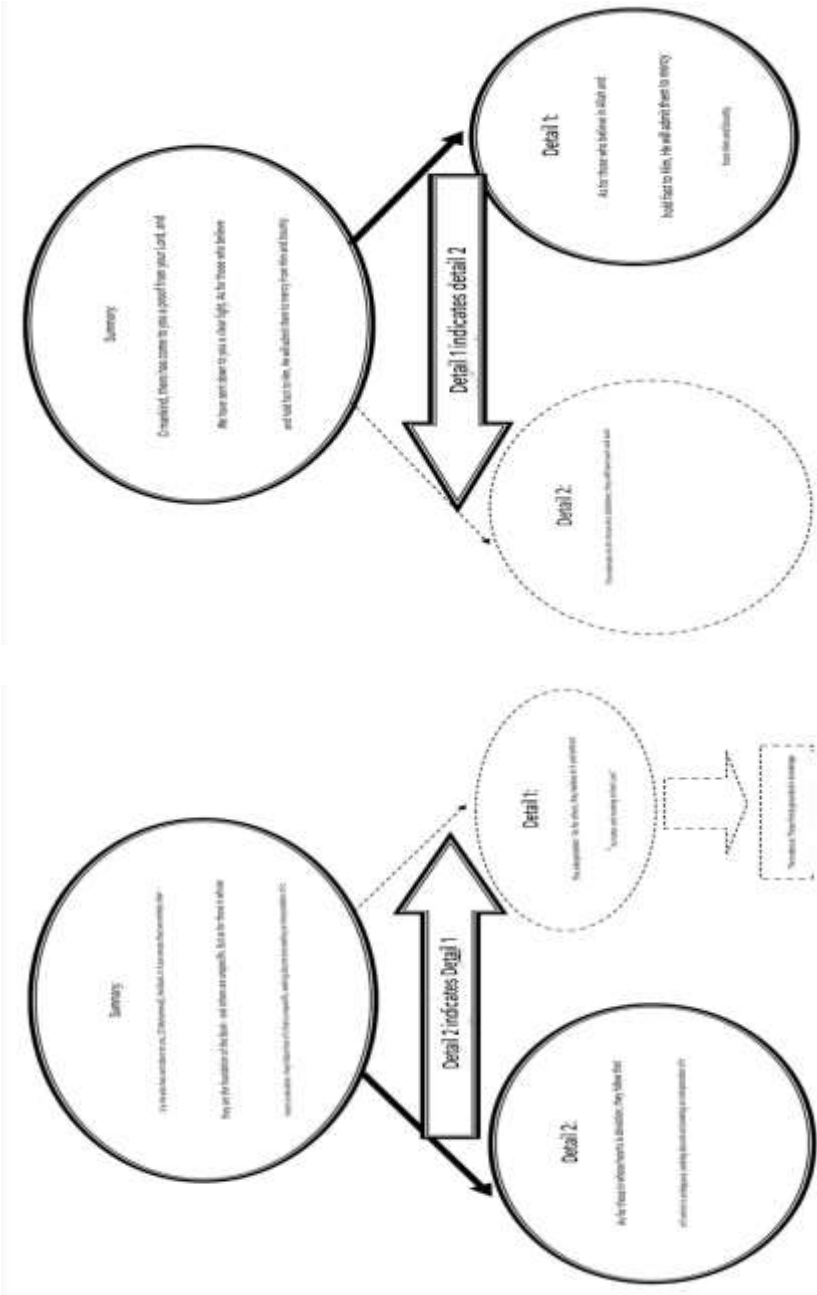
In this case, the second category is omitted, and the meaning is inferred as: *"As for those who disbelieve, they will have this and that."*

Moreover, the specification may replace the need to repeat "amma" by mentioning a statement afterward, which replaces the second category in words, but not in meaning, thus omitting it. An example is Allah's saying:

"And as for the others, they will believe in it and entrust its matter to their Lord..."

This substitutes the meaning of *"and as for others, they will believe in it and trust their Lord"* as an explanation for the belief in what is clear (المحكم) and what is allegorical (المتشابه).

Thus, it is clear that a phrase may carry two contrasting or divergent points, specified after a general statement. It is expected that "amma" might be repeated in meaning, but the words do not repeat it. Instead, the statement following it in the first specified part implies the second omitted part, and vice versa. The explanation could be found in this clarification.



The Qur'anic reference here lays the groundwork for another instance involving the omission of "أما" (*amma*)—while the second clause is explicitly mentioned and not dispensable—based on the anticipated meaning from the verse. The interpretation would then be: *"As for those firmly rooted in knowledge, they say..."*, and so the *wāw* (و) in the verse: ﴿وَالرَّاسِخُونَ فِي الْعِلْمِ﴾ is considered conjunctive to the earlier statement: ﴿وَمَا يَعْزُبُ عَنْهُمْ شَيْءٌ﴾, and not conjunctive to the statement: ﴿هُوَ الَّذِي أَنْزَلَ عَلَيْكَ الْكِتَابَ﴾—rather, it marks a new beginning of discourse. Based on this, the pause should be made at ﴿وَالرَّاسِخُونَ فِي الْعِلْمِ﴾, and the phrase ﴿وَالرَّاسِخُونَ فِي الْعِلْمِ﴾ is not conjoined to it, due to its grammatical opposition to the earlier clause, as it appears in the second part; much like how in the structure involving "أَمْ" we say: *"Either speak good or remain silent"*—meaning: *"Or else remain silent"*, where the second clause is elided but understood from the first, to which it is structurally parallel.

Likewise, the verse in *Surah Al-Baqarah* involving the pause at: ﴿إِنَّ الَّذِينَ كَفَرُوا سَوَاءٌ عَلَيْهِمْ﴾ demonstrates this structure, where the first clause is detailed for the believers and the second for the disbelievers, exemplifying a rhetorical method in the Qur'an. The use of "أَمْ" serves to present two balanced parts, clearly separated and paralleled—the first for the people of faith, and the second for the people of denial. Thus, the *fā'* (ف) in the verse: ﴿فَأَمَّا الَّذِينَ آمَنُوا وَعَمِلُوا الصَّالِحَاتِ﴾ is for initiating a new thought, not a conjunctive to what came before. This parallelism is intended to reinforce a doctrinal concept, as similarly observed in *Surah Aal-Imran*. It is not an intrinsic part of the sentence like in: *"As for Zayd, he is leaving."*

This understanding is further supported by linguistic analysis, especially when considering the phonemic presence in the speech wave, which becomes prominent on the

phrase: ﴿فَأَمَّا الَّذِينَ فِي قُلُوبِهِمْ زَيْغٌ﴾, thereby suggesting – without direct textual mention – the presence of "أَمْ" before ﴿وَالرَّاسِخُونَ﴾ (﴿فَأَمَّا الَّذِينَ فِي قُلُوبِهِمْ زَيْغٌ﴾, serving as the counterpart in the second clause to the first clause: ﴿فَأَمَّا الَّذِينَ فِي قُلُوبِهِمْ زَيْغٌ﴾). What follows is a detailed exposition: the first part concerning those with deviation in their hearts, and the second concerning those firmly grounded in divine knowledge and faith. This detail follows an earlier general reference: ﴿هُوَ الَّذِي أَنْزَلَ عَلَيْكَ الْكِتَابَ﴾...

This interpretation also highlights the connection of *mutashabihat* (ambiguous verses) to those who harbor deviation and doubt, seeking discord and false interpretations not intended by God. On the other hand, it affirms the firm knowledge and faith of those whom God has granted deep understanding – they entrust the full meaning and purpose to God alone. Thus, the Qur'anic expression places the burden and responsibility upon the people of deviation, contrasting with the second group who are unburdened, symbolizing their spiritual purity and divine favor.

This results in a balance of opposites: one group bears the blame for sowing discord and misinterpreting, and is accompanied by the structural tool "أَمْ" for conditional emphasis and clarification. The other group is lightened of their burdens because of their deep-rooted divine knowledge and unwavering faith. The omission of "أَمْ" in the condition, and the presence of the *fā'* in the response, still reflects the equivalence between the two clauses – albeit in contrast.

Third case: "أَمْ" as a particle of emphasis

This usage is rare, and it is likely that Al-Zamakhshari was among the first to point out that "أَمْ" can serve an emphatic function. He explicitly stated: "Its benefit in speech is to add an extra layer of emphasis. You might say: 'Zayd is

leaving', but if you intend to reinforce it—confirming his certainty and resolve—you say: 'As for Zayd, he is definitely leaving'." That's why Sibawayh interpreted it as: "*Whatever happens, Zayd is leaving*". This interpretation points to two functions: its emphatic nature and its implied conditional structure.

There are six ways in which something may come between "أَمْ" and the *fā'*:

1. **A subject (مبتدأ)**, as in:

- (فَأَمَّا مَنْ أُوتِيَ كِتَابَهُ بِيَمِينِهِ)
- (فَأَمَّا مَنْ ثَقُلَتْ مَوَازِينُهُ)
- (فَأَمَّا مَنْ أَعْطَى وَاتَّقَى)

2. **A predicate (خبر)**, as in: "As for in the house, Zayd is there."

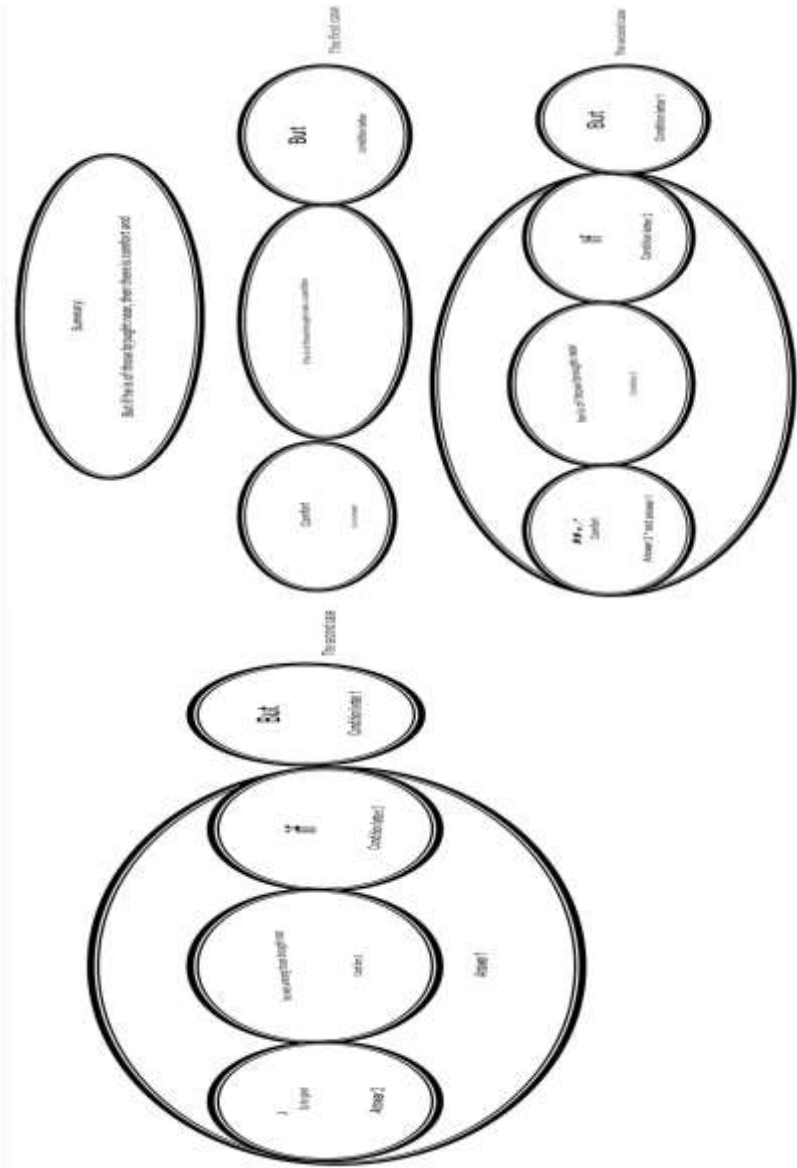
Al-Saffar considered such usage rare, while Ibn Hisham regarded it as common.

3. **A conditional sentence**, as in:

- (فَأَمَّا إِنْ كَانَ مِنَ الْمُقَرَّبِينَ)

Ibn Hisham seemed to argue that this was the answer to "أَمْ", not to the conditional clause itself. He gave two justifications:
 (a) If two conditions share one result, it applies to the first.
 (b) Omitting the response to "أَمْ" would be a shortcoming.

Thus, the conditional clause between "أَمْ" and the *fā'* (here: (إِنْ كَانَ مِنَ الْمُقَرَّبِينَ)) along with its result (فَرُوحٌ وَرِيحَانٌ) is treated as the answer to "أَمْ", explained by what follows.



1. A noun that is verbally accusative due to the response; like His saying (peace be upon him):

﴿وَقَالَ رَبُّكُمْ ادْعُونِي أَسْتَجِبْ لَكُمْ إِنَّ الَّذِينَ يَسْتَكْبِرُونَ عَنْ عِبَادَتِي سَيَدْخُلُونَ جَهَنَّمَ دَاخِرِينَ﴾ [غافر: 60]

Or accusative due to the response as well; like His saying (may Allah be pleased with him):

﴿وَقَالَ رَبُّكُمْ ادْعُونِي أَسْتَجِبْ لَكُمْ إِنَّ الَّذِينَ يَسْتَكْبِرُونَ عَنْ عِبَادَتِي سَيَدْخُلُونَ جَهَنَّمَ دَاخِرِينَ﴾ [غافر: 60]

All of these are in accusative positions for the object of the verbs "قهر" (to overpower), "تنهر" (to rebuke), and "حدث" (to inform).

2. A noun that is governed by an omitted verb explained by what follows "fa" (the conjunction); like: "As for Zayd, strike him"; and upon this was the reading of some by accusative of "Thamud" in His saying (may Allah be pleased with him):

﴿وَفِرْعَوْنَ إِنَّ فِرْعَوْنَ لَفِي ضَلَالٍ مُّبِينٍ﴾ [الفرقان: 38]

It is accusative as the object of an omitted verb, estimated as: "As for Thamud, or Thamud, We guided them," explained by: "وَفِرْعَوْنَ إِنَّ فِرْعَوْنَ لَفِي ضَلَالٍ مُّبِينٍ."

And "Zayd" is in the estimation of this; meaning: "As for Zayd, strike him," an omitted verb explained by the mentioned "strike him" in the manner of occupation.

And grammarians have estimated the governing verb after "fa," so the evidence is: "As for Zayd, strike him, strike him," and "As for Thamud, We guided them."

And as if "As for" is a substitute for the verb, and the intention is the sentence with its mentioned subject after it, and "As for" is considered a substitute for the omitted verb, because the verb does not follow the verb; and it is not from: "Zayd was doing," and "There is no creation of Allah like him," as the subject of the matter is separated between the first and second verb by the estimated pronoun of the matter

after "was" and "there is not" of the verbal, meaning: "Zayd was he doing," and "There is not he the creation of Allah like him"; and not the nominal, no problem in it because it resembles the verb, and it is a particle, not a verb.

And perhaps it was the reason for the neglect of Banu Tamim for it; they said: "There is no good except musk," by raising without accusative, so it does not govern in the news.

And perhaps the apparent in the position of the governed nouns that precede their governing particles in these evidences is what is in the estimation of emphasis according to Al-Zamakhshari, so the example is: "As for Zayd, he is departing," and although the news is in its place and its grammatical order, it is similar to what preceded of these grammatical governed nouns separated by "As for" and "fa" and what follows of the governing particles that occurred in the classical grammatical interpretation; but its linguistic interpretation is different from what the grammarians see, as it becomes clear that the governing verb in the preceding governed noun and separated by "As for" and "fa" in the grammatical interpretation is for the tone present in the intonated speech wave, and what it carries of physical, quantitative, and mechanical kinetic properties that enable it to govern, so it governs what follows it in the accusative or raises it in the nominative, and other states of governance in the governed; and the governing word comes after it in the grammatical interpretation, or explained by it in the estimation of the omission of the governing verb and mentioning what explains it after "fa," but in the linguistic quantitative interpretation, there is a verbal clue that matches the performance of the present tone, and explains it in the linguistic interpretive context; and this leads to the semantic resonance resulting from the present speech wave.

3. A noun governed by an omitted verb explained by what follows "fa" (the conjunction); like: "As for today, I am going"; or governed by the omitted verb; like: "And as for in the house, Zayd is sitting."

And the governing particle "fa" does not precede its news due to the impossibility of the estimation of its news before it, as the majority of grammarians and Al-Mazani (249 AH) and the majority feared them in this, and Al-Farra (207 AH) and Al-Mubarrad (285 AH) and Ibn Darestawayh (347 AH), so they made the news of "Inna" the governing verb in what precedes it, and Al-Farra permitted it in the sisters of "Inna" by expanding in it.

And this may open a linguistic path in the direct governance of the governing verb, as it branches from this grammatical difference between Sibawayh and the majority, and between Al-Farra who expanded in this issue and those who agreed with him in this, that the governance is attributed – in the linguistic quantitative interpretation – to the performance of the present tone in the intonated speech wave, to be the possibility of the occurrence of the present tone on the verbal "in the house" and "today" from the two evidences, after the relative difference in the expected linguistic structures; the first: "As for Zayd, he is sitting in the house" or: "As for in the house, Zayd is sitting," and "Inna" entered upon it, so it was: "As for Zayd, indeed he is sitting in the house" or: "As for in the house, indeed Zayd is sitting." The second: "As for me, I am going today

A noun that is in the accusative case in form due to the answer, such as in His (peace be upon him) saying:

}... (verse reference omitted for translation purposes) {

Or a noun in the accusative case in form and position due to the answer, as in His (may Allah be pleased with him) saying:

}... (verse reference omitted for translation purposes) {

All of these occur in accusative positions as objects of the verbs related to the answers: *taqhar* (oppress), *tanhar* (re-buke), and *haddith* (inform).

A noun that is the object of an omitted verb, clarified by what follows the particle "fa", such as in: “As for Zayd, strike him (أما زيداً فاضربه)”; based on this, some people read “Thamūd” in the accusative case in His (peace be upon him) saying:

}... (verse reference omitted for translation purposes) {

So, it is in the accusative case as an object of a deleted verb. The estimation is: *As for Thamūd, We guided them*, which is clarified by the following verse: }... (verse reference omitted for translation purposes) {. Likewise, in the sentence: *As for Zayd, strike him*, the verb *strike* is omitted and clarified by the verb that follows, following the principle of *ishtighāl* (preoccupation).

Grammarians have estimated the governing word after "fa", so the reference example becomes: *As for Zayd, strike – strike him*, and *As for Thamūd, We guided – We guided them*. It is as if "amma" substitutes for the verb, and the intended meaning is the full sentence with its subject mentioned after "amma". After "amma", it substitutes for the omitted verb because a verb cannot directly follow another verb.

This is not the case in examples like: “Zayd used to act,” and “None of God’s creation is like him,” because a hidden pronoun of *affair* (ḍamīr al-sha’n) separates the two verbs, such as: *Zayd was – he was acting*, and *None is – he is like God's creation*. In the case of the particle *laysa* (which functions similarly to a verb but is actually a particle), there is no issue, as it resembles a verb in function, although it isn’t one. This could be why the tribe of Tamīm neglected its rule and

said: *There is nothing good but musk* with the nominative case (*al-ṭayyibu*) instead of the accusative, so it does not act upon the predicate.

What seems apparent in cases where the governed noun precedes its governing word in these examples is what al-Zamakhshari considered an instance of **emphasis**. So, the example "*As for Zayd, he is leaving*" matches this pattern. Even though the predicate is in its proper syntactic position, it is similar to the preceding governed nouns that appear between "*amma*" and "*fa*", and which classical grammar explains.

However, in linguistic interpretation (beyond classical grammar), the agent acting upon the preceding object, and separated from it, is actually the **prosodic tone** (*tūnīm*) present in the **intonational wave** of speech, which has physical, quantitative, and dynamic mechanical properties that enable it to govern. It assigns the following word as an object or predicate, depending on the case.

Then, the syntactic verb (according to classical analysis) or its clarifier appears after the particle *fa*. However, in **quantitative linguistic interpretation**, it acts as a verbal clue that aligns with the performance of the recalled tone and explains it in the linguistic context.

This leads to **semantic resonance** (*une résonance sémantique*) resulting from the presence of the speech wave.

A circumstantial noun that is governed by *amma* due to its meaning of the verb; such as: "*As for today, I am going*". Or governed by an omitted verb; such as: "*As for in the house, Zayd is sitting*".

The governing word cannot precede *inna* after *fa*, as its predicate cannot be positioned before it, and likewise, its governed word cannot precede it. This view is held by Sibawayh, al-Mazani (249 AH), and the majority of scholars.

However, al-Farra' (207 AH), al-Mubarrad (285 AH), and Ibn Duraistawayh (347 AH) disagreed, allowing the governing word to precede in sentences like this, and al-Farra' allowed this for the sisters of *inna* in an expanded sense.

This could open a linguistic path for the direct action of the governing word, as it branches from the grammatical dispute between Sibawayh and the majority, and between al-Farra' who expanded on this issue and those who agreed with him. The action is ascribed – in the **quantitative linguistic interpretation** – to the performance of the tone present in the **intonational speech wave**. The possibility of the tone falling on the words “in the house” and “today” from the two examples, after the relative change in the expected linguistic structures, is as follows:

1. *As for Zayd, he is sitting in the house* or *As for in the house, Zayd is sitting*; after introducing *inna* (verbal particle), it would become: *As for Zayd, he is indeed sitting in the house* or *As for in the house, indeed Zayd is sitting*.
2. *As for me, I am going today* or *As for today, I am going*; after introducing *inna*, it would become: *As for me, indeed I am going today* or *As for today, indeed I am going*.

The change in **physical, quantitative, and dynamic mechanical** characteristics occurs according to the variations in the linguistic structures, reflected by the performance of the tone. The peak of the intonation falls on the potential word resulting from this change. This explains al-Farra's expansion on this matter to the point of extending it to the sisters of *inna*.

This **quantitative linguistic interpretation** might align with what Ibn Hisham mentioned regarding the possibility of the governing word being *amma* or the predicate, as there

is no obstacle to them. The speaker could say: *As for today, I am sitting* (أما اليوم فأنا جالسٌ), while it is prevented by the majority to say: *As for Zayd, I am striking him* (أما زيداً فأني ضاربٌ), on the grounds that *amma* does not govern the object, and the object of *inna*'s predicate cannot precede it. However, al-Mubarrad and those who agreed with him permitted considering *inna*'s predicate as governing its object, recognizing that the tone may play a role in influencing the linguistic outcome in the **intonational speech wave**.

The **quantitative linguistic interpretation** here reflects the possibility of the governing action occurring after *amma*, contrary to the traditional grammatical view. For instance, in *As for Zayd, I am striking him* (أما زيداً فأني ضاربٌ), the peak of intonation could fall on "Zayd" in the accusative, as part of the intonational speech wave that has **physical, mechanical, and quantitative properties**. The peak might occur either on "I" in the first structure or on "Zayd" in the second, depending on the variations of these physical properties.

Ibn Hisham's argument was based on the phrase he heard from the Arabs: "*As for the slaves, they belong to the master*" (أما العبيد فأنو عبيد) and "*As for Quraysh, I am the best of them*" (أما قريشاً). This indicated the permissibility of certain issues:

- The **interpretation** of these examples could extend beyond mere traditional syntactical analysis, as there is no need to necessarily postulate: "Whatever it may be," and what follows it can be treated as accusative based on the verbal action implied: "*Whatever I mention, the slaves belong to the master*" or "*Whatever I mention, Quraysh, I am their best*" or "*Whatever I mention, knowledge, it is that the scholar is in charge*". This would be a more precise and fluid construction, compared to forcing a syntactical interpretation that treats the fol-

lowing part as a nominal predicate, creating a smoother flow of meaning.

- It is not permissible for *amma* (like other particles) to govern the object. Some have argued that it can govern circumstances (conditions) due to its similarity to a verb and its substitution for it, but this argument is not universal, and Ibn Hisham refuted it.
- It is permissible to say: “As for Zayd, indeed I honor him” (أما زيداً فإني أكرم), as it assumes a deleted verb governs the object; otherwise, the predicate would have to precede it. The intended construction would be: “Whatever I mention Zayd, indeed I honor him” based on the rule: “Whatever I mention Zayd, I strike him” in the case of “As for Zayd, I strike him.”

This aligns with the **quantitative linguistic interpretation** that explains grammatical action through accusative (direct object) or nominative (predicate) cases according to the traditional grammatical rules. It also supports the use of verbal deletions like “Whatever I mention” or “Whatever may be” in the **linguistic wave** interpretation, showing the flexibility in applying grammatical principles.

The analysis shows that the performance of the tone (intonation) governs the sentence structure. The peak of this tone determines the accusative or nominative cases in each interpretation.

Ibn Hisham also clarified some of what was said about the verse:

}... (verse reference omitted for translation purposes){

He concluded that this is not one of the categories of *amma*, because it is simple and not derived from *amma* meaning “but” (used for contrast), and it is not interrupted. He argued that this is not used with questions, and the phrase that

follows does not necessitate the use of the interrogative form. All of it forms a single word, a result of the fusion between the two *mim* sounds from *amma* and *ma* (the interrogative particle).

This subtle point in the syntax suggests that the **phonological** performance is significant. The first sound [*am*] of *amma* (CV-C) connects with *ma* (CVV) in a single phonological unit, then closes with [*dha*] (CVV), as if blending to signify the question form.

The **quantitative linguistic interpretation** explains that the tone in the speech wave holds the **physical, mechanical, and dynamic** properties, which shape the meaning in the sentence. In this case, the potential for an **interrogative** interpretation arises from the tone itself, dismissing the possibility of *amma* being conditional. The **physical properties** influence the meaning and context of speech, explaining shifts in grammatical interpretation.

Similarly, the explanation of the poet's words:

"O Abu Khurasha, were you of a group? For my people have not been eaten by the hyena."

Shows that *amma* might be derived from *an* (the source particle) and *ma* (the particle for questioning), resulting in the interpretation: "*If I were of a group, I would not have been eaten by the hyena.*" This explanation connects with the **phonological** performance of the tone in the speech wave, suggesting an implied **verbal performance**.

This observation aligns with Ibn Hisham's explanation of the syntactical construction in classical grammar.

Conclusions

This linguistic practice, which bridges Arabic linguistic phenomena with philosophical and quantitative physical projections, provides some answers to academic concerns related to this subject and to hypothetical problems that arise when facing this modest scientific presentation. It seeks to incorporate these concerns into a set of quantitative linguistic procedures within the classical linguistic study, particularly the section on "prepositions" (i.e., '**Amma**'), through a bold and new study that offers fresh interpretations, diverging from traditional linguistic studies, especially classical grammar. These traditional studies typically focused on explaining the grammatical material in its verbal form, without exploring the minimal elements of the language or advancing beyond its grammatical level to another realm. The basic morphological material, which was traditionally the foundation of linguistic material, remained confined to the analysis of phonemes and words in classical Arabic grammar. This led to a linguistic stagnation when it came to exploring Arabic at the level of the individual word, with minimal results produced from repeating traditional linguistic practices. The explanation and interpretation were often lacking, relying on repetition without a critical review.

However, driven by ancient civilizational motivations, universal laws, and progressive academic methodologies, there was a necessary shift in these old practices in favor of the current analytical and interpretative methods brought about by modern civilization, without affecting the core Arabic linguistic material. Instead, it altered the way of analyzing, explaining, interpreting, and proposing interpretations of Arabic linguistic phenomena through a quantitative lin-

guistic lens. Among the methodological approaches and projections made on Arabic linguistic studies is the integration of quantitative linguistic analysis with ancient linguistic materials.

The linguistic outcome of these methodological approaches is as follows:

1. **The Academic Engagement with Quantum Philosophical Projections:** The academic discussion of applying quantum philosophical projections to linguistic studies, particularly in the realm of "prepositions" (i.e., 'Amma), has proven to be fertile ground for serious and substantive Arabic linguistic studies. The first principle is a rigorous scientific approach born from the precise sciences, and the second principle is the sound mathematical logic that the sciences as a whole adhere to. This approach opens new horizons for Arabic linguistic studies, offering hope for serious academics to revise the classical Arabic linguistic heritage, eliminating outdated interpretations and methods that no longer align with modern scientific thought.
2. **The Strict Methodological Tools in Quantum Physics Applied to Linguistics:** The strict methodological tools derived from the exact sciences analyze language in its structural, biological, and physical forms ("l'organe du langage"). This approach aligns with the material human constitution, emphasizing the natural physical and biological aspects of the language rather than its social, psychological, or communicative functions. This distinction sheds light on the differences between studying language from a purely physical and structural perspective versus focusing on its hu-

man functions, which are intertwined with psychological phenomena and social interactions.

3. **The Clarity of Quantitative Linguistic and Philosophical Projections on Traditional Linguistic Studies:** The fusion of quantum philosophy and linguistics reveals the ongoing analysis of Arabic linguistic materials, starting from their origins and advancing toward comprehensive explanations that align with established academic norms. The process of analysis and explanation is followed by scientific interpretation based on mathematical logic. This represents a significant shift from traditional grammatical explanations, in which interpretation stagnated after analysis, with no further progression to new theoretical insights.
4. **The Epistemic Linguistic Connection Between Arabic Linguistics and Quantum Physics:** The academic integration of Arabic linguistics with quantum physics reveals an epistemic linguistic connection between the ancient linguistic tradition (represented by the early Arab linguists like Al-Khalil and Sibawayh) and modern linguistic practices. This connection promotes the enrichment of Arabic linguistic theory, encouraging Arabic linguists to apply new interdisciplinary insights from precise sciences to further develop the field. This fosters a renaissance of Arabic linguistic theory that builds on both ancient and modern academic advancements.
5. **Availability of Quantum Physical Projections in Arabic Linguistic Studies:** By employing the tools and methodologies derived from the exact sciences, particularly quantum physics, Arabic linguists now have

access to rigorous academic techniques and a borrowed scientific terminology. This provides an opportunity to bridge the terminological gap that has hindered the progress of Arabic linguistic authorship, classification, and theorization.

6. **New Research Horizons in Quantitative Linguistics:** The application of quantum linguistic analysis opens new research horizons that have not been proposed before. These new research paths are based on a rigorous academic methodology and precise scientific techniques that aim to rejuvenate classical linguistic studies while preserving the linguistic uniqueness of Arabic. This new approach enriches the Arab linguistic tradition and encourages further development in the field.
7. **The New Arabic Linguistic Theory Derived from Quantum Methodology:** The methodological procedures based on quantum physics push modern Arabic linguistics toward the development of a new linguistic theory, distinct from Western linguistic paradigms. This theory incorporates the rich linguistic material of Arabic, alongside traditional terms and concepts, while also integrating scientific insights from quantum physics. This fusion forms a bridge between ancient linguistic heritage and modern linguistic practices, reinvigorating the study of Arabic linguistics and ensuring its continued relevance in contemporary academic discourse.

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The Role of Modern Technology in Motivating Individuals with Physical Disabilities to Engage in Adapted Sports Activities

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Abstract:

The present study aimed to investigate the role of modern technology in motivating individuals with motor disabilities to engage in adapted physical and sports activities. To achieve the study's objectives, the researcher adopted a descriptive approach. A questionnaire consisting of 14 items in its final form was designed to measure the role of modern technology in encouraging individuals with motor disabilities to participate in adapted sports activities. It was administered to a sample of 16 individuals. Using a set of statistical methods, the study concluded that modern technology – through the contribution of social media platforms and online forums – plays a significant role in raising awareness, increasing knowledge, and promoting engagement in adapted sports among people with motor disabilities.

Keywords: *Modern technology – Adapted physical and sports activity – Individuals with motor disabilities*

Le rôle de la technologie moderne dans la motivation des personnes handicapées physiques à s'engager dans des activités sportives adaptées

Résumé :

La présente étude visait à examiner le rôle de la technologie moderne dans la motivation des personnes souffrant de handicaps moteurs à s'engager dans des activités physiques et sportives adaptées. Pour atteindre les objectifs de l'étude, le chercheur a adopté une approche descriptive. Un questionnaire composé de 14 items dans sa forme finale a été conçu pour mesurer le rôle de la technologie moderne dans l'encouragement des personnes souffrant de handicaps moteurs à participer à des activités sportives adaptées. Il a été administré à un échantillon de 16 personnes. En utilisant un ensemble de méthodes statistiques, l'étude a conclu que la technologie moderne - à travers la contribution des plateformes de médias sociaux et des forums en ligne - joue un rôle important dans la sensibilisation, l'augmentation des connaissances et la promotion de l'engagement dans les sports adaptés parmi les personnes ayant un handicap moteur.

Mots-clés : *Technologie moderne - Activité physique et sportive adaptée - Personnes handicapées moteur*

Introduction

Theoretical Framework

In light of rapid technological advancement and the widespread use of the internet, digital platforms—including electronic sports websites and social media—have come to play an increasingly important role in providing information and encouraging individuals to engage in physical activities. However, a significant segment of society continues to face unique challenges in this regard: individuals with motor disabilities. Encouraging this group to participate in adapted physical activities is vital for their overall health and well-being, which requires a specialized knowledge infrastructure and sustainable support.

People with motor disabilities face numerous challenges when it comes to engaging in sports, including limited access to appropriate facilities, a lack of resources, and a scarcity of tailored programs. Here, digital platforms emerge as effective tools for delivering guidance and resources that support this group—ranging from advice on suitable exercises to specialized training programs. In addition, social media platforms offer a valuable means for enhancing interaction and communication, enabling individuals to share experiences and exchange knowledge, thus fostering a sense of belonging and mutual motivation.

Social media platforms such as Facebook contribute to supporting individuals with motor disabilities by creating digital environments that encourage participation in adapted physical activity. These platforms assist in improving both psychological and motor aspects, as adapted sports help reduce isolation and negative emotions while promoting social integration. They

also enhance motor skills and general health, which positively influences self-esteem and personal development.

Accordingly, this study aims to explore the role of digital platforms-whether electronic sports websites or social media-in motivating individuals with motor disabilities to engage in physical activity.

Adapted Physical Activity, as well as its contribution to promoting positive attitudes, modifying undesirable behaviors, and ensuring the continuity of sports performance for this important segment of society, is highlighted.

Statement of the Problem:

The problem of the study was identified through the researcher's observation of numerous sports websites that may contribute to encouraging the practice of adapted physical activities. These platforms play a significant role in motivating individuals with physical disabilities to engage in adapted sports. The main challenge faced by people with physical disabilities is accessing appropriate and suitable sports opportunities that match their needs and physical abilities.

Sports websites serve as one of the effective means for providing knowledge resources and guidance on types of suitable sports activities. They offer adapted training programs tailored to individuals' motor abilities. By offering diverse content including stretching exercises, muscle strengthening, and appropriate nutritional guidelines, these platforms can motivate physically disabled individuals to take steps toward improving their health and physical fitness.

Digital platforms also play a vital role in building supportive and encouraging communities, where physically disabled trainees can exchange experiences and motivate one another. This fosters a sense of belonging and ongoing encouragement to maintain regular participation in adapted sports. In this way,

sports websites can be effective partners in boosting the self-confidence of individuals with physical disabilities and reinforcing their belief in their ability to succeed in the field of adapted sports—thus enhancing their overall health and well-being. From this, the following research question arises:

Do modern technologies play a role in motivating individuals with physical disabilities to participate in adapted physical activities?

Research Questions:

- Do social media platforms play a role in motivating individuals with physical disabilities to engage in adapted physical activities?
- Do online forums play a role in motivating individuals with physical disabilities to participate in adapted physical activities?

Research Hypotheses:

- Social media platforms play a role in motivating individuals with physical disabilities to participate in adapted physical activities.
- Online forums play a role in motivating individuals with physical disabilities to participate in adapted physical activities.

Research Objectives:

To understand the role of modern technology in motivating individuals with physical disabilities to engage in adapted physical activities.

- To identify the role of social media platforms in encouraging individuals with physical disabilities to participate in adapted physical activities.
- To explore the role of online forums in motivating individuals with physical disabilities to engage in adapted physical activities.

Significance of the Study:

Practicing adapted sports is essential for improving the health of individuals with physical disabilities, as they can access suitable training programs specifically designed to meet their unique needs. This is made possible through the information and guidance available on sports-related websites. By participating in sports communities via these digital platforms, individuals feel a sense of belonging and ownership, which fosters interaction, experience-sharing, and mutual motivation.

Additionally, offering rich sources of information about the importance of adapted physical activity for individuals with physical disabilities—along with guidance on how to overcome challenges and achieve success in this field—contributes to increased awareness and enhanced self-confidence. Through support and encouragement provided by sports websites, individuals with physical disabilities can build self-trust and strengthen their belief in their abilities, which motivates them to achieve greater success in participating in adapted sports activities.

1. Definition of Concepts and Terms:

1.1 Modern Technology :

Terminological Definition: A set of tools and methods resulting from scientific and cognitive advancement, used to improve individuals' lives and facilitate various processes.

Operational Definition: Modern technology refers to all digital devices such as smartphones, computers, tablets, and the associated digital applications used to provide information.

To improve communication or facilitate access to activities and services, with the aim of enhancing the participation of individuals with physical disabilities in adapted sports activities.

1.2 Adapted Physical Activity

Terminological Definition: It is a set of advanced and diverse programs of sports and games tailored to the abilities of individuals with special needs, enabling them to fulfill their desire to engage in sports activities that benefit them and help them utilize their capabilities. (Zeroual Mohamed, Nawasir Mostafa, 2021, p. 44)

Operational Definition: It is a type of sports activity that has been modified or adapted to be suitable for individuals with special needs or disabilities. The goal of adapted physical activity is to provide equal opportunities for all individuals to participate in sports and benefit from its health and social advantages.

1.3 Individuals with Physical Disabilities

Terminological Definition: It refers to a person's inability to perform a task that others can do. Disability becomes a limitation when it restricts a person from performing expected activities at a certain stage of life. (Aliwa Alaa El-Din, Riyadh Osama, 2006)

Operational Definition: It is a condition that affects an individual's movement and limits their ability to move naturally or transition easily. This disability can result from issues in the musculoskeletal or nervous system.

Applied Aspect:

2. Exploratory Study :

The exploratory study is the first step in the research process. It helps the researcher gain a comprehensive understanding of the aspects of the field study. The purpose of this study is to ensure the appropriateness of the research location and the validity of the tools used for collecting information about the research topic.

- For this reason, the researcher conducted this exploratory experiment to identify the following:
- Obtaining consent from the study sample.
- Understanding the study population and potential challenges.
- This requires conducting a field survey and interacting with individuals from the target community.
- Assessing the suitability and validity of the tool: The researcher must evaluate the tool used in the study to ensure its appropriateness and effectiveness.

3. Research Methodology:

The methodology refers to the framework followed by the researcher to conduct the study or research in order to understand the problem and reach desired solutions or conclusions. The choice of methodology depends on the nature of the topic and the goal of the research, and may vary from one study to another based on these factors.

-The researcher employed the **descriptive method**, which is suitable for this study.

3.1 Study Population:

The study population refers to the group or community that constitutes the core of the research and includes all individuals

or elements related to the studied phenomenon. Exploring the entire research population is a challenging and costly task, requiring significant effort and resources. For this reason, the researcher may narrow the scope of the study by selecting a sample from the population that is adequately representative and effectively serves the research objectives. This approach helps reduce costs, time, and required effort while ensuring accurate and reliable results.

-The study population consists of **physically disabled individuals undergoing training in vocational training and apprenticeship centers.**

3.2 Study Sample:

The study sample is defined as a specific part selected from the original population. It may include a group of individuals or elements that represent the population as a whole. The researcher relies on the selected sample to build the research, aiming to ensure that the sample is representative of the overall population. This allows for accurate and reliable results that can be generalized to the original population. General patterns or findings can then be confidently inferred from the sample to the broader population.

- The sample consisted of 16 physically disabled individuals undergoing training in vocational training and apprenticeship centers.

4. Research Tool:

4.1 Questionnaire Form:

-The questionnaire was used as the data collection tool in this study due to its availability and ease of use, in addition to being the most suitable tool for achieving the research objectives.

-The questionnaire consists of a set of questions related to the specific topic and is either sent or handed directly to the targeted individuals to obtain their responses. (Kounda Salma,2018, p22)

The final version of the questionnaire consists of two main sections, each section divided into a set of questions.

The following table illustrates the questionnaire's axes and the questions under each section.

Table (01): Number of Questionnaire Sections

No	First Section: Sports Electronic Articles
01	Your subscription to social media platforms contributes to raising awareness about adapted physical activities.
02	Using the most popular social media platforms helps in introducing and promoting adapted activities.
03	You spend a lot of time on social media following adapted physical activities.
04	You use social media to learn about the value of adapted physical activities.
05	Social media platforms provide insight into the value of engaging in adapted physical activities.
06	Social media platforms enhance knowledge about participating in adapted physical activities.
07	You encourage your peers on social media to get involved in adapted physical activities.
No	Second Section: Sports Electronic Forums
01	You participate in online sports forums to gain information about engaging in adapted physical activities.
02	You find that sports forums inspire and motivate you to start practicing adapted physical activities
03	You believe that sports forums provide sufficient and accurate information about suitable sports activities

	for you.
04	You feel that sports forums contribute to positively changing your sports lifestyle.
05	You find that participating in sports forums motivates you to continue practicing adapted physical activities regularly.
06	You find that sports forums provide you with an opportunity to interact with others who share their experiences and motivations
07	You would like to see more sports-related content on forums aimed at motivating you toward practice.

4.2. Scoring Method:

The researcher relied on the **Likert scale** method to evaluate the responses of the participants. The scores obtained by each individual for each statement in the questionnaire can be accumulated. The **three-point Likert scale** was used in this study.

5. Psychometric Properties of the Study Tool:

5.1. Validity:

In research context, **validity** refers to the reliability or accuracy of the tool or test in measuring what the researcher intends and achieving the study's objectives. Therefore, a high level of validity means that the tool is capable of providing accurate and reliable measurements of the phenomenon the study aims to examine. This allows the researcher to confidently use the obtained data to guide interpretations and conclusions towards reality. (Al-Mashhdani, Saad Salman, 2019, p. 15)

-To calculate the validity of the study tool, the researcher relied on the validity of experts.

5.1.1 Expert Validity:

The initial version of the questionnaire was presented to a group of **three experts** who specialize in adapted physical activities to evaluate its validity.

5.1.2 Self-Validity:

Self-validity is defined as the square root of the reliability coefficient. Since the reliability of our tool was 0.79, its self-validity is 0.88.

$$\sqrt{0.79} = 0.88$$

5.2 Reliability:

In a research context, **reliability** refers to the stability of the measurement or test results over multiple applications. In other words, if a measurement or test is repeated for an individual, the results will be similar or consistent each time. When a test is reliable, it demonstrates high objectivity, meaning it measures the intended property consistently and objectively, so that any researcher applying or evaluating the test will obtain the same results, regardless of the circumstances surrounding the test. (Al-Mashhdani, Saad Salman, 2019, p. 10)

-To calculate the reliability of the study tool, the researcher relied on Cronbach's Alpha coefficient.

Table (02): Shows the reliability coefficient result using the Cronbach's Alpha formula.

Variable	Number of Statements	Cronbach's Alpha Coefficient	Significance Level
First Section	07	0.76	0.05
Second Section	07	0.82	

The **Cronbach's Alpha coefficient** was high, with a value of **0.80**, which indicates strong reliability for the tool.

5.3. Objectivity:

The **objectivity** of the test refers to the minimal or absence of variation in the evaluation of the performance of the participants, regardless of differences among the evaluators. The lower the variance between the evaluators, the more objective the test is, meaning it exhibits a high degree of objectivity. (Al-Mashhdani, Saad Salman, 2019, p.23)

6. Statistical Methods Used in the Study:

In the current study, the **SPSS software (version 25)** was used to process the data and information. The following statistical methods were employed:

- **t-test for a single sample.**
- **Cronbach's Alpha coefficient for reliability.**
- **Mean and standard deviation** to assess the level of the variable among the sample participants.

6.1. Analysis of Results and Discussion:

6.1.1. *Presentation and Analysis of the First Hypothesis:*

Text of the First Hypothesis:

Social media plays a role in motivating individuals with physical disabilities to engage in adapted physical activities.

To verify this hypothesis, we used the **t-test for a single sample** to check for significant differences between the mean scores of the overall score for the first section.

Table (03): Represents the Mean Scores and Standard Deviations for the First Section

Sample	Mean Score	Hypo- thetical Mean	Stan- dard Devia- tion	Signifi- cance Level	T-test	Sig	Deci- sion
16	15.59	1.47	0.05	9.77	0.00	14	Signi- ficant

Source: Prepared by the researcher based on SPSS outputs.

Analysis of the Results in Table 03:

The table represents the mean scores and standard deviations of the responses from the study sample on the questionnaire. The mean score of the responses was **15.59**, with a **standard deviation** of **1.47** and a **significance level (sig)** of **0.00**. Upon examining the significance of these differences, we find that the **sig** value is less than the significance level we set, which is **0.05**, and even at **0.01**.

- -Therefore, the alternative hypothesis is accepted: Social media plays a role in motivating individuals with physical disabilities to engage in adapted physical activities.
- -The study showed that individuals spend a significant amount of time on social media following adapted physical activities, which contributes to raising awareness about the importance and health and psychological benefits of these activities.
- -These platforms allow individuals to access valuable information on how to practice these activities, where they are available, and the necessary equipment, which increases users' knowledge base.
- -Through sharing successful experiences and motivational videos, social media encourages individuals, including those with physical disabilities, to engage in these activities.

Social Media Platforms are no longer just tools for entertainment or communication; they have become powerful instruments for social and positive change in the context of adapted physical activities. These platforms play a central role in raising awareness, disseminating knowledge, and encouraging participation in adapted physical activities. **This supports the validity of our hypothesis:** Social media plays a role in motivating individuals with physical disabilities to engage in adapted physical activities.

6.1.2. Presentation and Analysis of the Second Hypothesis: Text of the Second Hypothesis:

Electronic forums play a role in motivating individuals with physical disabilities to engage in adapted physical activities.

To verify this hypothesis, we used the **t-test for a single sample** to check for significant differences between the mean scores of the overall score for the second section.

Table (04): Represents the Mean Scores and Standard Deviations for the Second Section

Sample	Hypo- thetical Mean	Mean Score	Stan- dard Devia- tion	Si- gnifi- cance Level	T- test	Sig	Deci- sion
16	14	14.42	1.86	0.05	6.30	0.01	Si- gnifi- cant

Source : Prepared by the researcher based on SPSS output.

Analysis of the Results from Table 04:

- This table represents the mean scores and standard deviations of the responses from the study sample on the

questionnaire. The mean score of the responses was 14.42 with a standard deviation of 1.86 and a significance level of sig 0.00.

- By examining the significance of these differences, we find that the value of sig (significance level) is less than the significance level we used, which is 0.05 and even at 0.01.
- -Thus, the alternative hypothesis is accepted: Electronic forums play a role in motivating individuals with physical disabilities to engage in adapted physical activities.

7. Discussion of the Results:

- Electronic sports forums play a significant role in motivating individuals with physical disabilities to engage in adapted physical activities.
- -This is attributed to the role these forums play in highlighting the importance of adapted physical activities for individuals with physical disabilities.
- -These forums provide profound positive aspects, beyond being just a physical exercise and sport for them.
- They go beyond being a successful means of recreation for individuals with mobility impairments; they also play an important role in restoring self-realization, patience, and the desire to gain experience and enjoy life.
- Additionally, through these forums, individuals can exchange advice and experiences on how to overcome challenges and difficulties they may encounter while practicing adapted physical activities.
- This allows participants to feel supported and motivated by a community that understands their challenges, shares their goals, and helps them integrate into it. Online social interaction and participation in electronic sports communities provide this space.

- -This confirms the validity of our hypothesis: Electronic sports forums play a role in motivating individuals with physical disabilities to engage in adapted physical activities.

7.1. General Hypothesis:

Text of the General Hypothesis: Modern technology plays a role in motivating individuals with physical disabilities to engage in adapted physical activities.

To test this general hypothesis, we used the one-sample t-test to check for significant differences between the mean scores for the overall survey.

Table 05: Represents the mean scores and standard deviations of the responses from the study sample for the overall score on the questionnaire.

Sample Size	Hypo-the-tical Mean	Mean Score	Standard Devia-tion	Signifi-cance Level	T-Test	Sig	Deci-ci-sion
16	14	30.01	3.32	0.05	8.24	0.00	Si-gnifi-cant

Source: Prepared by the researcher based on SPSS output.

Analysis of Results from Table 05:

The results from Table 05 represent the overall mean scores and standard deviations of the responses from the study sample. The overall mean score for the responses was **30.01** with a standard deviation of **3.32** and a significance level (sig) of **0.00**. By analyzing the significance of these differences, we find that the **sig** value (significance level) is less than the significance level we used, which is **0.05**, and even at **0.01**. Therefore, we accept the alternative hypothesis: **Modern technology plays a**

role in motivating individuals with physical disabilities to engage in adapted physical activities.

7.2. Discussion:

- -Modern technology plays a strong role in motivating individuals with physical disabilities to engage in adapted physical activities. Social media and online forums, as part of modern technology, provide effective tools to increase awareness, spread knowledge, and offer psychological and social support. This integrated effect of technology helps individuals with mobility impairments engage in adapted physical activities, enhancing both their physical and psychological well-being.
- -Social media and online forums play a crucial role in encouraging individuals with mobility impairments to participate in adapted physical activities.
- -These roles complement each other to form part of the broader impact of modern technology. When combining the role of social media (which provides quick access and motivational content) with that of online forums (which offer specialized knowledge and psychological support), the effect of technology becomes more comprehensive and effective in motivating individuals with mobility impairments.

This proves the validity of our hypothesis: Modern technology plays a role in motivating individuals with physical disabilities to engage in adapted physical activities.

Conclusions

Sports Websites play a role in motivating individuals with physical disabilities to engage in adapted physical activities by providing an interactive environment for them to communicate with others who share similar challenges. They can exchange experiences, provide emotional support, and motivate one another.

Electronic Sports Articles also play a role in motivating individuals with mobility impairments to engage in adapted physical activities by providing valuable information about suitable activities and the necessary adjustments to accommodate their needs, allowing them to make informed decisions.

Online Sports Forums contribute to motivating individuals with mobility impairments to engage in adapted physical activities. These forums may feature success stories and challenges overcome by others, which can inspire and encourage participants to continue their efforts.

Online Sports Communities can create a supportive environment where individuals feel a sense of belonging and motivation. This can significantly encourage participants to achieve their fitness goals.

Suggestions and Recommendations:

Develop Special Platforms for Disabled Individuals: Launch electronic sports platforms specifically targeting individuals with mobility impairments, providing customized content and tips on suitable activities for different types of disabilities.

Encourage Active Participation in Forums: Encourage participants to actively engage in forums by asking questions and

sharing their personal experiences, which will help build a strong interactive community.

Include Content on Benefits and Overcoming Challenges: Add content that focuses on educating participants about the benefits of adapted physical activities and how to overcome individual challenges.

Organize Virtual Sports Events: Organize virtual fitness challenges or online sports competitions to motivate participants and promote healthy competition.

Provide Information on Assistive Technology: Provide information on assistive technology and tools that can enhance the experience of individuals with mobility impairments during physical activities.

Social Media's Role: Social media plays a role in introducing adapted physical activities since the majority of respondents use and follow sports-related content on their smartphones through social media platforms.

Promote Awareness Through Social Media: Social media platforms, by following sports pages, motivate participants to engage in and seek out adapted physical activities.

Influence through Influencers: Social media also contributes to shaping participants' attitudes and increasing awareness by following active sports coaches and trainers through these platforms.

Additional Suggestions:

Electronic Applications: Propose electronic applications developed by specialists that contribute to highlighting the importance of adapted physical activities from various perspectives (e.g., awareness, involvement).

Create Online Pages and Websites: Establish websites that focus on promoting methods for practicing adapted physical activities for individuals with special needs.

Strengthen Social Organizations: Activate the role of social organizations by raising awareness among individuals with special needs about the importance of practicing adapted physical activities at an early age.

Enhance Social Media Usage: It is essential to focus on social media to improve the work presented and ensure it aligns with the needs of this specific group.

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Women's Sports through the Official Bodies' Pages on Social Media Platforms: An Analytical Study of the Algerian Olympic and Sports Committee's

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Abstract:

This study addresses the media coverage of various aspects and issues related to women's sports through the official pages of Algeria's official sports institutions, specifically focusing on the official Facebook page of the Algerian Olympic and Sports Committee the body that represents Algeria in the International Olympic Committee.

The study is grounded in the Agenda-Setting Theory within the functionalist perspective, and it adopts the descriptive survey method. Content analysis was used as the primary data collection tool to analyze the posts published on the committee's page during the period from January 1 to January 31, 2024.

The study seeks to answer the following main research question:

How did the posts on the official Facebook page of the Algerian Olympic and Sports Committee address women's sports in terms of form and content during the period from January 1 to January 31, 2024?

Keywords: *Women's sports, sports organizations, social media platforms, Facebook pages*

Le sport féminin à travers les pages des instances officielles sur les plateformes de médias sociaux : Une étude analytique de la page Facebook du Comité olym- pique et sportif algérien

Résumé :

Cette étude traite de la couverture médiatique de divers aspects et questions liés au sport féminin à travers les pages officielles des institutions sportives officielles algériennes, en se concentrant spécifiquement sur la page Facebook officielle du Comité olympique et sportif algérien, l'organe qui représente l'Algérie au sein du Comité international olympique.

L'étude est fondée sur la théorie de l'établissement de l'agenda dans une perspective fonctionnaliste et adopte la méthode d'enquête descriptive. L'analyse de contenu a été utilisée comme outil principal de collecte de données pour analyser les messages publiés sur la page du comité pendant la période allant du 1er janvier au 31 janvier 2024.

*L'étude cherche à répondre à la question de recherche principale suivante :
Comment les posts de la page officielle Facebook du Comité olympique et sportif algérien ont-ils abordé le sport féminin en termes de forme et de contenu durant la période du 1er janvier au 31 janvier 2024 ?*

Mots-clés: Sports féminins, organisations sportives, plateformes de médias sociaux, pages Facebook

Introduction

The successive developments in communication technologies across their various generations have sparked a revolution that has affected all elements of the communication environment. These advancements have also brought about profound changes at the level of the human being, both as a producer and consumer of these technologies, as well as at the level of the media that carry messages, which are now produced intensively and in real time. This boom has impacted various aspects of life and human activities.

Most researchers agree that social media on the internet, also referred to as social networking platforms, represents one of the most significant communication technologies that has brought about profound transformations in contemporary societies. It has notably influenced various human activities, accelerating their growth and intensifying the flow of ideas particularly due to its continuous development and the rapid updating of its services.

These platforms have shifted human interaction from its simple forms in traditional spaces to more complex forms in the virtual realm, characterized by fluid boundaries. They have introduced new modes of communication by eliminating spatial and temporal constraints and making these interactions accessible to all segments of society through writing, sharing images and videos, and even exchanging knowledge. This accessibility has led to their widespread use. Social media has established virtual interactive contexts marked by unique, individualized relationships. Among the most prominent and widely used platforms is Facebook, due to the nature of communication it facilitates and the wide range of services it offers. These include the ability to create user groups and pages based

on shared interests and preferences, which are often created by ordinary individuals, professionals, hobbyists, media institutions, or official organizations seeking to remain closely connected to their audiences. These entities leverage the platform's features such as rapid dissemination, userfriendliness, and interactive capabilities.

Sports media is considered one of the specialized types of media that has found a place on this network through pages, especially those affiliated with sports institutions or organizations, unlike pages belonging to individuals or media institutions. These sports organizations, such as federations and committees, have been keen to maintain a constant presence close to their audience in order to provide them with information covering their activities as well as the activities of the sports teams and athletes under their umbrella .

The status of women in Algerian society, like in other societies, is one of the indicators that reflect the level of societal development over time. Based on the opportunities and resources available to them, women have managed to participate in all fields of life, overcoming many obstacles, especially social and cultural ones. They have entered the realms of politics, economy, and business, holding various positions, including leadership roles. Among the fields in which women have excelled is sports, where Algerian sportswomen have achieved significant accomplishments and won numerous awards and championships.

This highlights the role of the media in supporting women's sports due to its impact on members of society, especially new media with its various channels, including social media platforms. These platforms have become free spaces for blogging and publishing in the sports field, particularly pages affiliated with sports institutions and organizations. Through their posts, they engage in daily communication and interaction with their

users by keeping them updated on the latest news about teams, sports competitions, athletes, and providing spaces for exchanging ideas and discussions on various sports topics and issues, including women's sports.

Among these sports pages is the official page of one of Algeria's sports organizationsthe Algerian Olympic and Sports Committee, representing the International Olympic Committee. It was established shortly after independence, specifically in 1963, and it is the subject of our study in this research paper. The study is based on **the Agenda Setting** approach, aiming to reveal the extent of the committee's attention to women's sports disciplines and the nature of its coverage of their various games, topics, and issues.

"Accordingly, the main research question of our study is formulated as follows;

How did the posts on the official Facebook page of the Algerian Olympic and Sports Committee address the topics of women's sports during the period from January 1 to January 31, 2024, in terms of form and content?

A set of sub-questions arises from this main question, as follows :

- ✓ What is the nature of the posts addressing women's sports topics on the page under study, and to what extent do they utilize multimedia during the study period?
- ✓ What journalistic formats were used in the posts on the page that addressed women's sports topics during the study period ?
- ✓ What language was used in the posts on the page under study that addressed women's sports topics during the study period ?

- ✓ What types of content were featured in the posts addressing women's sports topics on the page during the study period ?
- ✓ Who are the key figures featured in the posts addressing women's sports topics on the page during the study period ?
- ✓ How did Facebook users interact with the posts addressing women's sports topics on the page during the study period ?

Importance and Objectives of the Study:

The importance of this study lies in its attempt to shed light on the extent of media attention given to women's sports, particularly through social media platforms, which have garnered significant interest among users. This is especially relevant given our focus on the official page of the most prominent multi-sport organization in Algeria the Algerian Olympic and Sports Committee.

Moreover, the study holds importance from a media perspective, as it underscores the necessity for media outlets of all types to fulfill their core roles not only in informing and delivering accurate information, but also in entertaining and highlighting women's interests on an equal footing with men's. This is particularly vital in areas that are not traditionally associated with women, as previously noted.

Objectives of the Study:

Through this study, we aim to achieve the following objectives:

- ✓ To identify the nature of posts related to women's sports and the extent to which multimedia is employed in the posts on the page under study.

- ✓ To determine the journalistic formats used in the posts addressing women's sports on the page under study.
- ✓ To examine the language used in the posts covering women's sports on the page under study.
- ✓ To explore the types of content featured in the posts related to women's sports on the page under study.
- ✓ To identify the key figures featured in the posts addressing women's sports on the page under study.
- ✓ To analyze the nature and level of user interaction with the posts concerning women's sports on the page under study.

Reasons for Choosing the Topic:

- ✓ The researchers' interest in the field of sports media as a form of specialized media that provides targeted services to a specific audience the sports audience by ensuring coverage of various sports events and competitions.
- ✓ To shed light on the most prominent sports topics and issues that occupy both local and global public opinion.
- ✓ The scarcity of studies that have addressed women's sports from a media coverage perspective, especially within the context of online media in general and social media networks in particular.
- ✓ A desire to explore and reveal the interests of women in fields beyond the commonly associated domains such as cooking, beauty, and home décor.
- ✓ The choice to focus on social media platforms in this study stems from the significant position they have come to occupy, due to the growing user engagement, their distinctive features—such as the speed of information delivery—and the various services they offer.

Additionally, the interactivity characteristic has brought about a revolution in media contexts.

- ✓ Beyond the importance of the themes addressed in this study, another key point is the reliance on content analysis , as a methodological tool. This method has been fundamentally associated with media studies, based on the premise that linguistic behavior whether spoken or written is the most accurate reflection of an individual's identity, tendencies, and orientations. As researchers argue, by obtaining a sample of such linguistic output and subjecting it to a systematic scientific analysis, it becomes possible to uncover precise and reliable scientific truths .

1. Defining Concepts:

1.1 Women's Sports:

Sport: It is an activity that involves physical effort and skill, governed by rules and customs, usually practiced competitively. There are physical sports, spiritual and mystical sports, and memory sports (**Al-Maany, Online Dictionary**).

The word "sport" in both French and English, and the Latin term *diport*, whose etymological origin is *disport*, means diversion and change. Its meaning and essence come from the idea that people transform their concerns and work-related preoccupations into leisure and recreation through sport (**Zankawi, 2010, p. 88**).

Adib Khaddour offers a more comprehensive and deeper explanation of sport, describing it as an individual and collective activity as well as a social and historical phenomenon. Sport is part of an integrated civilized environment; it embodies values, ethics, culture, and education. It is influenced by science and technology, performs roles, fulfills functions, and accomplishes various tasks. Sport is an organized game and an

essential human need that one must practice just as one practices eating, drinking, and other necessities. Thus, sport represents education, health, activity, prevention, and civilization. **(Khaddour, 1994, p. 11).**

Sport is classified into several types and according to various categories, including individual sports and team sports, as well as sports for all and competitive sports. It is also classified according to the gender of the athlete into men's sports and women's sports, or male and female categories.

1.2 Sports Organizations:

Sports organizations are defined as institutions established by society to serve the sports sector from all aspects, They have an organizational structure that corresponds to the size and objectives of these institutions, aiming to benefit the community in alignment with its goals, They also represent a social formation connected to the sports field as a profession and industry, Their objectives determine the nature of the activities carried out by the organization and the interactions between these activities and other societal institutions. **(Qarmash & Ashasha, 2021, p. 07) .**

1.3 Social Media Platforms:

These are websites formed on the web that allow individuals to create personal profiles about their public or semi-public lives, providing the opportunity to connect with a list of registered users and express the views of individuals and groups.

1.4 Facebook:

The concept of "Facebook" is based on relying on **Web 2.0** to create a social network that enables a group of young people to establish continuous relationships through photos, audio, vid-

eo, and other applications. The idea of its creation goes back to its **founder Mark Zuckerberg**, who designed a new website on the internet to connect his classmates at **Harvard University** to share their photos, news, and opinions. It was launched in 2004 and was initially limited to university and school students for two years, after which it was opened to anyone who wanted to use it. The result was a surge in the number of users, from 12 million in December 2006 to more than 40 million in 2007. That same year, the site allowed developers to create applications, which led to a significant increase in users (**Abdel Fattah, 2014, p. 199**).

In 2011, Google released a list of the top 100 websites worldwide based on user numbers and visits, with Facebook ranking first, having approximately 800 million visitors. According to Bakers, the number of users reached 963,675,160nearly one billionin April 2013 (**Hamouda, 2013, p. 65**), noting that newer statistics show even larger figures. Jamal Zarn describes Facebook as a phenomenon topping all figures, with 500,000 new subscribers joining daily, which equals about 6 new people every second (**Zarn, 2017, p. 07**).

1.5 Facebook Pages:

Facebook pages are one of the many services provided by the social networking site Facebook. They enable any user of the site to benefit from them and their features, which primarily derive from the site itself. The concept is based on creating and designing a page where various data are placed according to its orientation and purpose. The types of pages vary depending on their basic concept (**Haddad, 2019, p. 26**).

2. Methodological Procedures of the Study;

2.1. Type of Study:

Our study belongs to the descriptive studies, which aim to understand the existence of phenomena and describe them. This is done through a series of sequential and interconnected stages that the research goes through until the objectives are achieved.

Descriptive studies are not limited to merely collecting statistical data; rather, their scope includes classifying, interpreting, and analyzing data and facts comprehensively, extracting useful conclusions and implications (**Hassan, 1976, p.**

The aim of descriptive studies is to clarify the characteristics of the phenomenon and explain its prominent aspects, which requires good prior knowledge of the study problem. (**Larmy & Valley, 2004, p. 241**)

This is also the case with this study, through which we seek to describe the reality of the interest and treatment by the official Facebook page of the Algerian Olympic and Sports Committee regarding women's sports topics by measuring this interest and treatment.

2.2. Study Methodology:

Choosing the most appropriate methodology to follow in any study is essential for achieving accurate and valid scientific results. The method we consider suitable for our study is the descriptive survey method. The survey method is a systematic and scientific effort to obtain data, information, and descriptions about the phenomenon or set of phenomena under investigation (**Hussein S, 1999, p. 147**).

2.3. Data Collection Tool:

The stage of selecting the appropriate tool is one of the most important steps in scientific research due to its crucial role in gathering the targeted information and data in the study. Choosing the right tool is a very important step in any scientific research. In our study, we used a scientifically and methodologically controlled tool to collect information and data related to the study, which is compatible with the methodology used and its quantitative nature. This tool is content analysis, which also aligns with the communication element we are studying the message.

Content analysis is a set of methodological steps aimed at discovering the underlying meanings in the content and the correlational relationships associated with these meanings, through an objective, quantitative, and systematic examination of the manifest features in that content (Abdel Hamid, 2010, p. 55).

Among the recent definitions of content analysis is that provided by **Claude Krippendorff**, who views content analysis as a research method used to analyze media messages with the aim of reaching accurate and consistent inferences and conclusions when the research and analysis are repeated (**Tamar, 2007, p. 07**).

According to **Youssef Tamar**, the content analysis technique is characterized by a set of features, including:

- Content analysis concerns both linguistic and non-linguistic materials, such as written, audio, and visual expressive images.
- Content analysis focuses on the manifest content, meaning what is explicitly written or said within the content.
- It can address static symbols like written texts or dynamic symbols like films and music.

- It is a research technique that confirms what other methods and techniques cannot reach.
- It specializes in analyzing media of any form that carry messages whose content can be observed and thus analyzed. (Tamar, 2007, p. 07)

In this study, the two researchers used the content analysis tool in a new and different way compared to its use in analyzing the content of traditional media. This approach is sometimes referred to in some references as web content analysis or electronic content analysis. Although the common feature between it and the analysis of traditional media content is the constant and central connection of this tool with the message, which may be verbal such as written or spoken words or non-verbal, like signs, gestures, shapes, drawings, and others, the difference lies primarily in the formal distinction between the content of new media and that of traditional media.

Content on the web is presented in various forms including texts, images, videos, links, and even emoticons, not to mention the difference in the medium itself between new and traditional media, especially with the new variables imposed by the nature of the communication medium such as interactivity, speed of information circulation, and continuous content updating (Mubarak, 2020, pp. 79-81).

2.3.1 Content Analysis Categories:

The purpose of establishing categories in content analysis is to divide the content into a system of ideas directly related to the research problem and objectives, thus avoiding other ideas that do not serve those directions (Tamar, 2007, p. 06). Content categories are defined as smaller parts in which a unit of attributes, characteristics, or weights gather, and these are considered as “pockets” or places where the researcher places

everything that corresponds to these attributes or characteristics. Based on the theoretical framework of the research problem, the researcher begins formulating classification criteria, facilitating the process of categorization and defining categories precisely (Abdel Hamid, 2010, p. 113).

In our study, we used the content analysis tool but in a different and innovative way, namely **electronic content analysis** or **analysis of website content**. Therefore, we tried to form categories that serve our objectives and answer our questions, as follows:

2.3.2. Form (Structural) Categories:

These categories describe the formal aspect of the content to be studied, and they usually aim to answer the question: **How was it said?** In our study, they were as follows:

- **Category of the nature of posts and multimedia:** This refers to the nature of the material used in the topics and posts of the studied page. The goal is to reveal the nature of the content and the extent of its use of multimedia such as images, videos, and others.
- **Category of journalistic types (formats):** This category concerns the forms of journalistic writing. It seeks to classify the content under study into written types such as news, article, interview, and other journalistic genres.

2.3.3. Content Categories:

These are the groups of categories that describe the meanings and ideas appearing in the content. They focus on answering the question: **What was said?** This category includes several subcategories, among which the most important for our study are:

- **Topic category:** This is one of the most used categories in media and communication research. This category

aims to answer the question: What is the subject of the research? That is, what are the most prominent topics in the content? These categories help identify focal points of interest in the content (**Abdel Hamid, 2010, p. 121**).

Each main topic is divided into subtopics according to the research objectives and needs, and the possibility of applying these subcategories. Since the main topic in our research is women's sports topics, we divided it into subtypes based on the number of athletes (**individual sports and team sports**), according to geographic scope (**national competitions and international competitions**), and other classifications.

- **Category of Key Figures:**

This category seeks to identify the main drivers in the content, meaning the group of individuals, bodies, or organizations that create the event in the content under analysis. It is important for understanding the key figures in any content, their way of thinking, and their style of addressing others (**Tamar, 2007, p. 67**). In our study, we formed appropriate subcategories for this topic, including officials, coaches, female athletes, fans, etc.

- **Category of Interaction with Posts:**

This category was chosen given the nature of the materials to be analyzed and the nature of the medium carrying them, which is the Facebook social network. It was necessary to define interaction as a characteristic feature of new media in general, and social networks in particular. Interaction can occur through comments, reaction options (**Like, , Wow, Sad, etc...**), and also by sharing the post. This category also includes the language of comments and their tone or direction.

2.3.3. Units of Content Analysis:

Units of content analysis are defined as content units that can be easily counted and measured. Their presence or absence, frequency, or emphasis provides indications that help the researcher interpret quantitative results (**Hussein S., 1999, p. 266**). A unit of analysis is a specific segment of a message or a group of messages representing the same characteristics and nature of the category (**Tamar, 2007, p. 49**).

In our study, we used the following units of analysis:

- **Idea** **Unit:**
In this study, the idea unit was relied upon as the unit for counting and measurement. The idea is one of the most commonly used units of analysis in media research that uses content analysis because it provides clearer indications of the direction of the content, and through it, the meanings contained in the content can be understood.
- **Character** **Unit:**
We also relied on the character unit, which refers to the person or persons who are the focus of attention (**Tamar, 2007, p. 12**).

4. Research Population and Study Sample:

In content analysis, the term "population" refers to the set of similar messages expressed through carriers called communication media, whose characteristics the researcher wants to identify (**Tamar, 2007, p. 12**).

The research population is the entire group of elements on which the researcher seeks to generalize results related to the studied problem (**Bash-**

bwa et al., 2010, p. 253).

The target population in our study consists of all posts on the page under study. The accessible population is the posts on the page during the month of January, specifically from January 1 to January 31, 2024 , The total number of posts on the page during this period was 52 posts, and we subjected all of them to analysis using a comprehensive census method of all items in the study population.

2.4 Theoretical Approaches to the Study:

Relying on a theoretical framework in any scientific study plays a significant role in increasing its accuracy and ensuring its rigor. Adopting scientific theories grants the research elements structural integration and serves as a guide throughout the various stages of the study until reaching final results.

Our study is based on the Theory of **Agenda-Setting**, **The Agenda-Setting model** is one of the important models within the functionalist approach, which focuses, rather than modifying individual behavior, on the media's role in sharing interests with people. When individuals are asked to describe their interests in the social system, and they find that the media gives importance to these interests as priorities, then the media has succeeded in establishing the social priorities for the members of society. (Dheeb, 2023, p.54)

This theory assumes that the media cannot present all the topics and issues existing in society; rather, those responsible for these media select certain topics to focus on intensively and control their nature and content. These topics gradually attract people's attention and make them aware of and think about them... Consequently, these topics represent relatively greater

importance for the audience compared to topics not presented by the media. (Makkawi& Al-Sayed, 1998, p.128)

3. Study Results:

In this study, we employed the Agenda-Setting Theory within the functionalist perspective, and we addressed the topic of women's sports through the official sports bodies' pages on social media, specifically analyzing the Facebook page of the Algerian Olympic and Sports Committee.

Our study started from a main question: How did the posts on the official Facebook page of the Algerian Olympic and Sports Committee cover the topics of women's sports during the period from January 1 to January 31, 2024, in terms of both form and content?

The Algerian Olympic Committee is a sports body whose first executive office was announced on October 18, 1963, consisting at that time of 12 members. Algeria took upon itself the mission of developing the sports sector to encourage and develop youth abilities and showcase their potentials after independence, as well as to represent the national flag in international sports forums.

According to its basic law, its tasks include developing and protecting the Olympic movement in Algeria based on and in accordance with the Olympic Charter, contributing to the promotion of national sports, representing it at the level of international bodies and organizations, developing high-level sports, and promoting sports for all. (Algerian Olympic Committee, 2021, retrieved from the Algerian Ministry of Youth and Sports website¹.

We subjected the study population's vocabulary the page's posts during the study period to comprehensive enumeration

¹ / <https://mjs.gov.dz/index.php/ar>

analysis. Before presenting the results, the page under analytical study is introduced through the following table :

Page Description	Page Link	page picture	
Page Information Algerian Olympic and Sports Committee. Tel : 023381301 Date Created: 12 February2017 Number of Likes: 244 k Number of Followers: 331 k	https://www.facebook.com/COAlgerie/?locale=ar_AR		Profile Picture
			Cover

“Figure (1) :shows the data of the page subscribers under study

Returning to the results, we have reached the following through this study:

- **Women's sports content published on the page under study:**
The study found that the number of posts on the page during the period representing the study population (January 2024) reached 52 posts. Among these, posts with women’s sports content accounted for 14 posts, representing 26.92%. This percentage included two topics covering both women’s and men’s sports together.

The rest of the posts were related to men's sports or male sports games, reflecting an acceptable interest in women's sports, as attention to any topic is indicated by increased media materials. This occurred despite the study period coinciding with two important men's sports events: the Africa Cup of Nations in Ivory Coast and the African Handball Championship in Egypt.

- **Regarding the nature of posts and multimedia:** Our study found that 92.86% of the women's sports posts were texts accompanied by images (at least one image per post). Of these images, 83.33% were news images, which illustrate the news and provide users with more details. The remainder were symbolic images, usually attached to topics to attract attention and are often old images rather than images taken during the event. The page used videos in only one post and did not use audio files or other multimedia formats. The page carefully used images in its posts to attract attention, enrich topics, and increase interaction with the content published by Facebook users.
- **Regarding journalistic types:** News was employed in 83.33% of the women's sports posts, including schedules or results of sports competitions. Most of these news items were brief, consistent with the nature of the medium — social networks, particularly Facebook. Another type used was the portrait, accounting for 16.66%, which served to introduce female athletes participating in various competitions or to highlight their achievements.
- **Regarding the category of the subject:** We divided the subject category into various subcategories, including types of sports or sports games contained in the women's sports posts on the page during the

study period. The posts covered many women's sports, both individual and team, local and international. Individual sports represented the largest percentage at 50%, while team sports accounted for 21.43%, and unspecified types (individual or team), including sports for persons with disabilities, represented 28.57%. Gymnastics ranked first in coverage with 21.43%, followed by wrestling at 14.28%. The percentages for other sports were low and equal; these include boxing, table tennis, rock climbing, athletics, volleyball, in addition to unspecified sports types (as mentioned earlier 28.57%), which include sports for persons with disabilities. This variation in the priority given to different sports can be explained by the fact that the study period coincided with competitions in those sports or specialties. The page promotes these sports or sports events primarily involving Algerian women. The page also aims to spotlight women's sports competitions for persons with special needs on every occasion.

In addition to the previous classification within this category, we also conducted another classification of the post topics according to the geographical scope of the sports competitions. The results were as follows:

- **Local sports competitions:** 0% referring to competitions held in Algeria.
- **External sports competitions:** 78.57% referring to regional or international competitions in which Algeria participates.
- **Foreign sports competitions:** 0% referring to competitions involving foreign countries or regions in which Algeria does not participate.
- **Others (unspecified):** 21.43%

- From these statistics and numbers, it can be concluded that during the study period, the page focused on external sports competitions to provide media coverage and support for Algerian female athletes and sports teams participating in them. Meanwhile, it paid no attention at all to local or foreign competitions. This is attributed to the nature of this sports body—the Algerian Olympic and Sports Committee—whose primary roles include promoting national sports and representing Algeria in international bodies and organizations.
- **Regarding the category of key figures:** Our study found that the main drivers behind the posts on the page under study were female athletes, accounting for 85.71%, followed by officials at a small percentage of 14.29%. This is natural and logical, considering that athletes are the primary actors in various sports, and it is expected that the media shines the spotlight on their news, especially if it concerns female athletes.
- **Regarding the category of interaction with posts :** Our study found that the number of comments users made on the page's posts during the study period reached 354 comments, a number that may change due to deletions or additions of new comments, The language used in the comments was varied, with a large percentage in Modern Standard Arabic despite grammatical and syntactical errors, followed by a smaller percentage in dialect and foreign languages. Among the topics that users interacted with more than others were those discussing awards and honors received by Algerian female athletes; The number of comments can be considered low compared to typical sports topics, which is explained by the fact that most news in the page's posts does not invite debate or discussion among followers.

The number of users who activated one of the reaction features (Like, Love, Wow, Haha, Sad) reached 4,121, a number that can increase or decrease. This feature generally expresses the users' attitudes toward the posted topics.

As for the number of users who shared the page's posts on their own accounts, groups, or pages they belong to during the study period, it reached 354 users, a figure that indicates the page is considered a reliable source for important sports news.

We also tried to classify the users interacting with the posts by gender and found that the majority were males compared to females, even though the posts were about women's sports. We interpret this as women in Algeria generally having low engagement with sports news, even when it concerns women's sports. It should also be noted that this result lacks precision, as verifying the true identity of interacting users remains a relative matter.

Conclusion

After reviewing and attempting to interpret the results, this research paper concludes with some suggestions and recommendations as follows:

- Continuous and ongoing attention by researchers to the study of media content, including new media such as social media platforms, and efforts to adapt the methodologies in line with the characteristics of these media, especially given the scarcity

of references and literature using electronic content analysis.

- The necessity for other researchers to focus on this research topic or one of its aspects due to its importance, considering that sports pages can be seen as a new form of specialized media and have gained a prominent position among users, especially youth, compared to traditional media.
- The need for sports pages to pay attention to various sports disciplines—both men's and women's—without focusing only on certain sports. This would contribute to promoting all sports, supporting female athletes, and highlighting their achievements and victories, especially when it comes to representing the country in international forums.
- Conducting more studies that shed light on all fields women have entered, including sports, moving away from stereotypical images commonly associated with them.

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Psychological Flexibility in Coping with the Challenges of Highly Dynamic Work Environments: Generational Differences as a Mediating Variable

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Abstract

The present study investigates the role of psychological flexibility in coping with the challenges of highly dynamic work environments, with a particular focus on the mediating effect of generational differences. Dynamic work environments – characterized by unpredictability, high workload, and emotional demands – are particularly prevalent in hospital emergency departments. Understanding how healthcare professionals from different generational cohorts manage these stressors can inform organizational strategies aimed at improving resilience and performance.

A total of 90 employees (including doctors, nurses, paramedics, and administrative staff) working in the emergency department of EPH Ahmed Medeghri Hospital in Saida Province, Algeria, participated in the study. Data were collected using the Acceptance and Action Questionnaire-II (AAQ-II) to measure psychological flexibility, the Work Environment Scale (WES) to assess perceived work challenges, and the Generational Cohort Scale (GCS) to categorize participants by generational identity. Prior to the main analysis, the psychometric properties of the Arabic versions of the scales were validated using a standardization sample of 35 healthcare professionals from Youssef Demerdji Hospital in Tiaret Province.

Data analysis involved confirmatory factor analysis, Pearson correlations, multiple regression, and mediation testing using Hayes' PROCESS macro. The results revealed a significant negative relationship between psychological flexibility and perceived work challenges. Furthermore, generational differences significantly mediated this relationship, indicating that employees from different cohorts perceive and respond to work demands in distinct ways.

These findings suggest that psychological flexibility serves as a protective factor in managing occupational stress, and that generational identity influences how this flexibility is expressed. The study highlights the need for workplace interventions that both promote psychological flexibility and are sensitive to generational differences among healthcare staff. Such strategies may be especially effective in enhancing well-being and performance in high-stress medical environments.

Keywords: *psychological flexibility, generational differences, work environment challenges, healthcare workers, Algeria*

Flexibilité psychologique pour faire face aux défis d'environnements de travail très dynamiques : Les différences générationnelles comme variable médiatrice

Résumé

La présente étude examine le rôle de la flexibilité psychologique dans l'adaptation aux défis posés par des environnements de travail très dynamiques, en mettant particulièrement l'accent sur l'effet médiateur des différences générationnelles. Les environnements de travail dynamiques - caractérisés par l'imprévisibilité, une charge de travail élevée et des exigences émotionnelles - sont particulièrement répandus dans les services d'urgence des hôpitaux. Comprendre comment les professionnels de santé des différentes cohortes générationnelles gèrent ces facteurs de stress peut éclairer les stratégies organisationnelles visant à améliorer la résilience et les performances.

Au total, 90 employés (médecins, infirmières, personnel paramédical et administratif) travaillant au service des urgences de l'hôpital EPH Ahmed Medeghri dans la province de Saïda, en Algérie, ont participé à l'étude. Les données ont été recueillies à l'aide du Questionnaire d'acceptation et d'action-II (AAQ-II) pour mesurer la flexibilité psychologique, de l'Échelle de l'environnement de travail (EET) pour évaluer les défis professionnels perçus, et de l'Échelle de cohorte générationnelle (ECG) pour catégoriser les participants en fonction de leur identité générationnelle. Avant l'analyse principale, les propriétés psychométriques des versions arabes des échelles ont été validées à l'aide d'un échantillon de normalisation composé de 35 professionnels de la santé de l'hôpital Youssef Demerdji, dans la province de Tiaret. L'analyse des données a comporté une analyse factorielle confirmatoire, des corrélations de Pearson, une régression multiple et des tests de médiation à l'aide de la macro-processus de Hayes. Les résultats ont révélé une relation négative significative entre la flexibilité psychologique et les défis professionnels perçus. En outre, les différences générationnelles ont contribué de manière significative à la médiation de

cette relation, ce qui indique que les employés de différentes cohortes perçoivent les exigences professionnelles et y répondent de manière distincte.

Ces résultats suggèrent que la flexibilité psychologique sert de facteur de protection dans la gestion du stress professionnel et que l'identité générationnelle influence la manière dont cette flexibilité est exercée. L'étude souligne la nécessité d'interventions sur le lieu de travail qui favorisent la flexibilité psychologique et tiennent compte des différences générationnelles au sein du personnel de santé. De telles stratégies peuvent être particulièrement efficaces pour améliorer le bien-être et les performances dans des environnements médicaux très stressants.

Mots-clés : *flexibilité psychologique, différences générationnelles, défis liés à l'environnement de travail, personnel de santé, Algérie*

Introduction

The contemporary workplace is undergoing a period of unprecedented transformation, characterized by rapid technological innovation, globalization, and shifting organizational structures (Bailey et al., 2017). These changes have created highly dynamic work environments where employees must constantly adapt to evolving demands and uncertainties. Psychological flexibility—a core process in Acceptance and Commitment Therapy (ACT)—has emerged as a crucial psychological resource that enables individuals to adapt effectively to such volatility (Kashdan & Rottenberg, 2010; Bond et al., 2011).

Psychological flexibility refers to the ability to remain in contact with the present moment and pursue valued behaviors, even in the presence of difficult thoughts, feelings, or situational stressors (Hayes et al., 2006). Research has shown that higher levels of psychological flexibility are associated with better mental health, lower burnout, and improved work performance (Donaldson-Feilder et al., 2014; Flaxman et al., 2013). Within organizations, it contributes to resilience, emotional regulation, and proactive coping strategies, especially in fast-changing environments (Bond & Bunce, 2003; Biglan et al., 2008).

While psychological flexibility is valuable across contexts, its role becomes particularly salient in workplaces where ambiguity and change are constant. Employees in dynamic sectors such as tech, healthcare, and creative industries are regularly exposed to shifting job roles, continuous learning requirements, and high performance expectations (Shoss, 2017). In these environments, the ability to adapt psychologically may serve as a buffer against stress and a facilitator of effective functioning.

However, coping mechanisms and perceptions of workplace change are not uniform across all employees. **Generational dif-**

ferences—including attitudes toward work, adaptability, and psychological resources—have been documented extensively in organizational behavior literature (Costanza et al., 2012; Lyons & Schweitzer, 2017). For example, Millennials are generally characterized as valuing flexibility, collaboration, and purpose-driven work, while Baby Boomers may prioritize structure, stability, and loyalty (Twenge et al., 2010; Holt et al., 2012). These generational traits may interact with psychological flexibility in complex ways, influencing how individuals cope with dynamic work contexts.

Despite this, relatively few studies have explored **generational differences as a mediating or moderating factor** in the relationship between psychological flexibility and workplace adaptation. Emerging evidence suggests that the effectiveness of psychological resources like flexibility may vary depending on age, generational cohort, and career stage (Wong et al., 2019; Nilsen et al., 2020). A nuanced understanding of this interaction is essential for developing targeted interventions and organizational policies that promote employee well-being and performance.

This study aims to fill this gap by investigating the role of psychological flexibility in coping with dynamic work environments, while examining generational differences as a **mediating variable**. By doing so, it seeks to contribute to a more differentiated understanding of psychological resilience across workforce demographics.

Hypotheses:

H1: A positive relationship between psychological flexibility (AAQ-II) and the ability to cope with workplace challenges (WES).

H2: Generational differences (GCS) moderate the relationship between psychological flexibility (AAQ-II) and coping strategies (WES).

H3: Generational differences (GCS) significantly influence employees' perceptions of work environment challenges (WES).

H4: Psychological flexibility (AAQ-II) mediates the relationship between generational differences (GCS) and perceived stress (WES).

H5: Higher psychological flexibility (AAQ-II) is associated with greater job satisfaction and better coping strategies (WES and GCS).

H6: Interactions between generational cohorts (GCS) and psychological flexibility (AAQ-II) predict perceived challenges in dynamic work environments (WES).

1. Methods

1.1. Research Design

This study employed a quantitative, cross-sectional, correlational design to examine the relationships among psychological flexibility, generational differences, and perceived challenges within highly dynamic work environments. The design was selected to allow for the measurement and analysis of naturally occurring variables within a real-world setting, specifically among employees working in the emergency department of EPH Ahmed Medeghri Hospital in Saida Province, Algeria.

1.2. Participants

The study sample consisted of 90 employees working in the emergency department of EPH Ahmed Medeghri Hospital in Saida Province, Algeria. The participants represented a diverse range of professional roles within the department. Specifically, the sample included 25 doctors (15 males and 10 females), 35

nurses (20 males and 15 females), 15 paramedics (10 males and 5 females), and 15 administrative staff (5 males and 10 females). In terms of gender distribution, 50 participants were male (55.6%) and 40 were female (44.4%). This composition ensured the inclusion of various perspectives and professional experiences relevant to the dynamics of emergency medical work environments. All participants were full-time employees at the hospital, with varying years of experience and educational backgrounds. Participation in the study was voluntary and anonymous, and informed consent was obtained from each respondent prior to data collection. The distribution of participants by job type, gender, is presented in **Table 1**.

Table 1 : *Demographic Characteristics of Emergency Department Employees by Job Title and Gender (N = 90)*

Job Title	Gender	n	%
Doctors	Male	10	11.1%
	Female	5	5.6%
Nurses	Male	12	13.3%
	Female	18	20.0%
Paramedics	Male	8	8.9%
	Female	4	4.4%
Administrative Staff	Male	7	7.8%
	Female	11	12.2%
Cleaning Staff	Male	3	3.3%
	Female	6	6.7%
Total		90	100%

Ethical considerations: Ethical considerations were upheld in accordance with University Charter of Deontology and Ethics (UCDE) approval, ensuring voluntary participation, informed consent, and data confidentiality.

Data Collection: Data were collected using two well-established and psychometrically validated instruments:

1.2.1. *The Acceptance and Action Questionnaire-II (AAQ-II)*
(Bond et al. 2011)

In this study, psychological flexibility will be measured using the Acceptance and Action Questionnaire-II (AAQ-II), a widely used instrument developed by Bond et al. (2011) to assess the degree to which individuals are able to accept unpleasant thoughts and feelings while pursuing meaningful goals. Originating in the United Kingdom and the United States, the AAQ-II was developed within the framework of Acceptance and Commitment Therapy (ACT) and has been validated across various cultural contexts, including Turkish, Chilean, and Chinese populations (Langer et al., 2024; Meunier et al., 2014; Zhang et al., 2014). The scale is particularly relevant in work environments characterized by high psychological demands and change, such as the emergency medical sector.

The AAQ-II consists of seven items, all measuring a single factor – psychological inflexibility – using a 7-point Likert scale ranging from 1 ("never true") to 7 ("always true"). Higher total scores indicate greater levels of experiential avoidance and psychological rigidity. Items are summed to yield a composite score ranging from 7 to 49. The scale has demonstrated robust psychometric properties in previous studies, with internal consistency coefficients (Cronbach's alpha) typically ranging between .78 and .88 (Bond et al., 2011). It has also shown adequate test-retest reliability over periods of 3 to 12 months and has demonstrated construct, content, and criterion-related validity through significant correlations with related constructs such as anxiety, depression, and life satisfaction (Zhang et al., 2014; Meunier et al., 2014).

In the context of this research, the AAQ-II will be used to evaluate how health professionals working in a highly dynamic emergency department cope with professional pressures and uncertainties. The scale will undergo a rigorous translation and cultural adaptation process using the forward-backward method to ensure linguistic appropriateness in both Arabic and French, the dominant languages in the research setting. Prior to full deployment, the adapted instrument will be pilot-tested for clarity and cultural relevance with a small sample of healthcare professionals from the same hospital.

1.2.2. The Work Environment Scale (WES) (Moos et al. 1974)

The Work Environment Scale (WES) was developed by Moos and colleagues (1974) to assess the social and environmental characteristics of work settings, with a focus on the demands and challenges that employees face. This scale has been widely used to examine various aspects of the work environment in health care settings and other high-stress professions. The WES is suitable for capturing the dynamic and demanding nature of environments like emergency departments, where professionals must manage constant change and unpredictability.

The WES consists of multiple dimensions that cover different aspects of the work environment. The most relevant dimensions for your study are "Work Demands" and "Work Climate." "Work Demands" assesses the extent to which employees face high levels of pressure, uncertainty, and constant change in their work tasks, while "Work Climate" looks at the general atmosphere of the workplace, including support, interpersonal relationships, and the overall emotional tone. Each dimension typically includes 5 to 10 items, with a Likert response scale ranging from 1 ("strongly disagree") to 5 ("strongly agree").

The WES has demonstrated strong psychometric properties across various settings. Reliability coefficients (Cronbach's alpha) for the "Work Demands" subscale typically range from 0.80 to 0.90, indicating good internal consistency. Validity evidence comes from both construct validity (e.g., correlations with job stress and burnout measures) and criterion-related validity (e.g., associations with job satisfaction and turnover intentions). The scale has been widely validated in different cultural contexts, making it applicable for international research.

1.2.3. *Generational Cohort Scale (GCS)* (Twenge, Campbell, and Freeman, 2012)

The **Generational Cohort Scale** was developed by to assess differences in work attitudes and values across different generational cohorts. The scale is based on the premise that generational cohorts (such as Baby Boomers, Generation X, and Millennials) have distinct characteristics influenced by socio-cultural factors, technology, and economic conditions. This scale is highly applicable to the study of work environments, particularly when examining how different generations cope with dynamic and stressful conditions at work. The GCS has been used in various studies, including those in healthcare and other high-demand sectors.

The GCS typically consists of multiple items designed to capture generational attitudes towards work, including work ethic, attitudes toward leadership, technology, work-life balance, and expectations of job roles. The scale is structured into several dimensions:

- **Work Ethic and Values**
- **Technology Use and Adaptation**
- **Work-Life Balance**
- **Leadership Expectations**

Each dimension includes several items, and the responses are typically measured on a Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). This allows for the identification of generational differences in specific aspects of work-related attitudes.

The **Generational Cohort Scale** has demonstrated strong psychometric properties in multiple studies. Internal consistency (measured using Cronbach's alpha) typically ranges between 0.80 and 0.90 for most dimensions, indicating good reliability. The scale has shown solid construct validity, with generational differences being clearly identified in areas such as work ethics, expectations for leadership, and attitudes toward technology. Further, criterion-related validity has been established through correlations with measures of job satisfaction, organizational commitment, and stress (Twenge, 2010; Twenge et al., 2012).

The Psychometric Properties

In the current study, the psychometric properties of the instruments were carefully assessed to ensure their appropriateness for the Algerian healthcare context. A standardization sample of 35 healthcare professionals from Youcef Damerdjil Hospital in Tiaret Province was used to evaluate the translation accuracy, construct validity, and internal reliability of the adapted scales. The translation process followed the forward-backward method, and expert review ensured the cultural and linguistic suitability of all items. Below is a summary of the adaptation procedures and psychometric evaluation conducted for each scale:

1. The Acceptance and Action Questionnaire-II (AAQ-II) In the current study, the scale was translated into Arabic and subjected to expert review by bilingual psychologists. Confirmatory factor analysis (CFA) supported the unidimensional structure of the scale in the Algerian context. The scale demonstrated

excellent internal consistency in the standardization sample, with a Cronbach's alpha coefficient of .89, indicating high reliability. The translated items showed strong semantic equivalence with the original, confirming the accuracy of the adaptation process.

2. The Work Environment Scale (WES) The version used in this study was adapted to reflect the organizational realities of Algerian hospital settings. Content validity was verified by a panel of experts in occupational psychology and healthcare management. CFA indicated good model fit for the three-factor structure (involvement, supervisor support, and pressure). The internal reliability of the total scale was acceptable, with a **Cronbach's alpha of .83** in the standardization sample. No significant cultural distortions were observed during the adaptation process.

3. The Generational Cohort Scale (GCS) : For the present study, items were translated and modified slightly to suit cultural and temporal references relevant to Algerian society. CFA confirmed the expected factor structure in the pilot sample. The internal consistency of the adapted GCS was satisfactory, with a Cronbach's alpha of .81. Content and face validity were evaluated positively by sociologists and HR specialists, ensuring the conceptual fidelity of the scale across generations within the Algerian health sector.

1.3. Variables

1.3.1. Psychological Flexibility

Definition: Psychological flexibility refers to an individual's ability to fully encounter the present moment and to persist or change behavior in accordance with personal values, even in the presence of difficult thoughts, feelings, and sensations (Bond et al., 2011). In this study, it is conceptualized as the capacity of hospital employees to adapt to rapidly changing work

conditions and emotional demands without becoming overwhelmed or disengaged.

Operationalization: Measured using the Acceptance and Action Questionnaire-II (AAQ-II), psychological flexibility is assessed as a unidimensional construct where higher scores indicate lower flexibility (greater experiential avoidance), and lower scores indicate greater flexibility.

1.3.2. Perceived Challenges in Highly Dynamic Work Environments

Definition: This variable reflects employees' perceptions of complexity, rapid change, workload intensity, and emotional demands within their workplace—particularly in settings where unpredictability and high responsibility are prevalent, such as hospital emergency departments (Moos & Insel, 1974).

Operationalization: Assessed using an adapted version of the Work Environment Scale (WES), this construct includes subscales such as involvement, supervisor support, and work pressure. Higher scores indicate a more demanding and dynamic work environment as perceived by the participant.

1.3.3. Generational Cohort Identification (Generational Differences)

Definition: Generational cohort refers to the shared experiences, values, and workplace expectations of individuals born in the same historical period, which shape their behavior and attitudes at work (Twenge, Campbell, & Freeman, 2012). In this study, generational differences are examined as a mediating variable that may influence how employees cope with work-related challenges depending on their generational identity (e.g., Baby Boomers, Generation X, Millennials, Generation Z).

Operationalization: Measured using the General Cohort Scale (GCS), which captures attitudinal and behavioral traits associated with generational identity. Participants' responses are categorized based on generational groupings defined by birth years, and the scale evaluates values such as autonomy, technology use, authority perception, and work-life balance.

Analysis

Data were analyzed using IBM SPSS Statistics (version 26) and AMOS for structural modeling. Prior to inferential analyses, preliminary data screening was conducted to ensure accuracy, identify missing values, and check for outliers. All variables were tested for normality, linearity, and homoscedasticity. Descriptive statistics were computed for each variable, including means, standard deviations, skewness, and kurtosis, to ensure data were suitable for parametric testing.

Reliability analysis was first performed for each scale using Cronbach's alpha, with values above .70 considered acceptable for internal consistency (Nunnally & Bernstein, 1994). Confirmatory factor analyses (CFA) were then conducted on the AAQ-II, WES, and GCS using AMOS to assess the construct validity and fit of the adapted Arabic versions. Fit indices included the Comparative Fit Index (CFI), Root Mean Square Error of Approximation (RMSEA), and Chi-square/df ratio.

To test the six research hypotheses, a series of Pearson correlation analyses were conducted to explore the bivariate relationships among psychological flexibility, work environment challenges, and generational identity. Following this, multiple linear regression analyses were performed to assess the predictive value of psychological flexibility and generational cohort on the perception of challenges in dynamic work environments.

Furthermore, to test the mediating role of generational cohort, Hayes' PROCESS macro (Model 7) was used to estimate conditional indirect effects. Bootstrapping procedures with

5,000 resamples were applied, and mediation was considered statistically significant if the 95% bias-corrected confidence intervals did not include zero (Preacher & Hayes, 2008). Effect sizes (e.g., Cohen’s d, R², standardized beta weights) were reported where appropriate to supplement significance tests and to interpret the practical relevance of findings. The threshold for statistical significance was set at $p < .05$ for all analyses.

2. Results

Before proceeding with hypothesis testing, we first present the descriptive statistics for the key variables involved in the study: psychological flexibility, work environment challenges, and generational cohort. Table 1 presents the mean, standard deviation, and range for each variable.

Table 2: *Descriptive Statistics for Key Variables*

Variable	Mean (M)	Standard Deviation (SD)	Minimum (Min)	Maximum (Max)
Psychological Flexibility (AAQ-II)	3.65	0.82	1.2	5.0
Work Environment Challenges (WES)	3.80	1.05	1.5	5.0
Generational Cohort (GCS)	3.25	1.25	1.0	5.0

Hypothesis 1: Relationship Between Psychological Flexibility and Work Environment Challenges

To examine the relationship between psychological flexibility (measured by the AAQ-II) and work environment challenges (measured by the WES), a Pearson correlation was conducted. The results revealed a significant negative correlation between psychological flexibility and perceived work environment challenges, $r(88) = -0.42$, $p < 0.01$, suggesting that higher psychological flexibility is associated with lower perceived challenges in the work environment. This result supports the hypothesis that individuals with greater psychological flexibility are better able to cope with the demands of a dynamic work environment.

To further illustrate and confirm the findings presented above, the following figure provides a visual representation of the results.

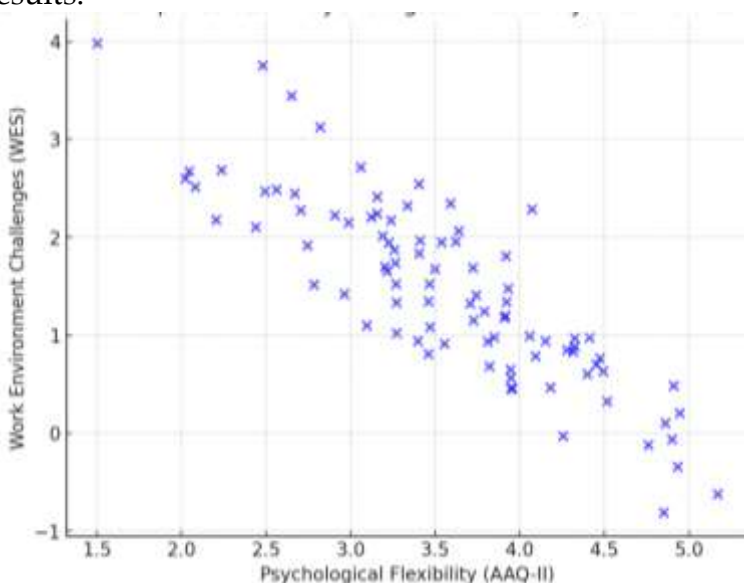


Figure 1: Scatterplot of the Relationship Between Psychological Flexibility (AAQ-II) and Work Environment Challenges (WES)

Hypothesis 2: Moderating Role of Generational Differences on the Relationship Between Psychological Flexibility and Coping Strategies

This table will display the results of the moderation analysis, showing how **generational differences** moderate the relationship between **psychological flexibility** and **work environment challenges**.

Table 3: Moderation Analysis Results Between Generational Cohorts and Psychological Flexibility

Predictor	B	SE	t-value	p-value	95% CI
Psychological Flexibility (AAQ-II)	-0.42	0.13	-3.23	< 0.01	[-0.67, -0.16]
Generational Cohort (GCS)	0.35	0.18	1.94	0.06	[-0.02, 0.72]
Interaction (AAQ-II × GCS)	-0.18	0.08	-2.34	< 0.05	[-0.34, -0.03]

A moderation analysis using PROCESS (Model 1) by Hayes (2013) was conducted to explore whether generational differences moderate the relationship between psychological flexibility (AAQ-II) and coping strategies (WES). The results indicated a significant interaction effect, $B = -0.18$, $t(88) = -2.34$, $p < 0.05$, suggesting that the effect of psychological flexibility on coping strategies was stronger among older generations (e.g., Baby Boomers) compared to younger generations (e.g., Millennials). This supports the hypothesis that generational differences influence how psychological flexibility affects coping strategies in the workplace.

To further illustrate and confirm the findings presented above, the following figure provides a visual representation of the results.

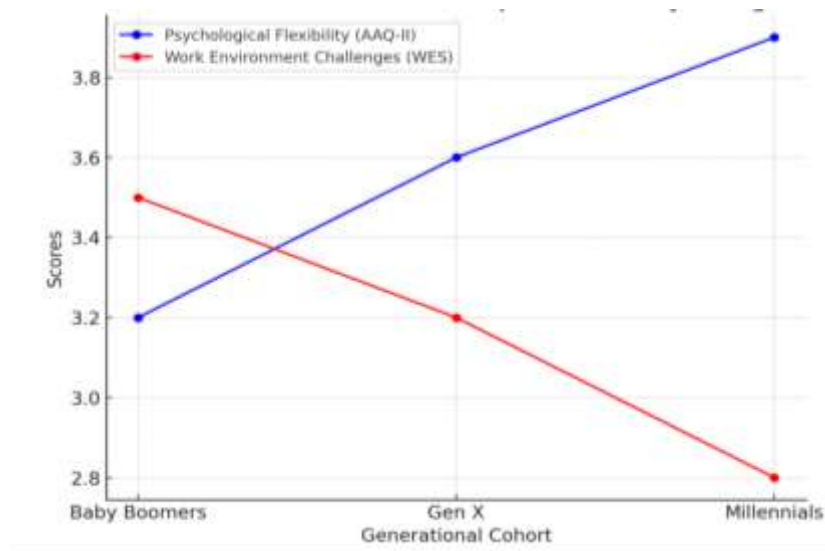


Figure 2: Moderation Effect of Generational Differences on the Relationship Between Psychological Flexibility and Coping Strategies

Hypothesis 3: Influence of Generational Differences on Perceptions of Work Environment Challenges

A one-way ANOVA will test whether there are significant differences in **perceptions of work environment challenges** across generational cohorts.

Table 4 ANOVA Results for Generational Differences in Perception of Work Environment Challenges

Source	Sum of Squares	df	Mean Square	F-value	p-value
Between Groups	7.35	3	2.45	4.32	0.007
Within Groups	51.62	86	0.60		
Total	59.97	89			

To test the hypothesis that generational differences significantly influence employees' perceptions of work environment challenges, a one-way ANOVA was conducted with generational cohort as the between-subjects factor and work environment challenges (WES) as the dependent variable. The results indicated a significant main effect of generational cohort on perceptions of work environment challenges, $F(3, 86) = 4.32$, $p < 0.01$. Post hoc comparisons revealed that Millennials reported significantly higher perceptions of work environment challenges compared to Baby Boomers and Generation X ($p < 0.05$), suggesting that younger generations perceive the work environment as more challenging.

To further illustrate and confirm the findings presented above, the following figure provides a visual representation of the results.

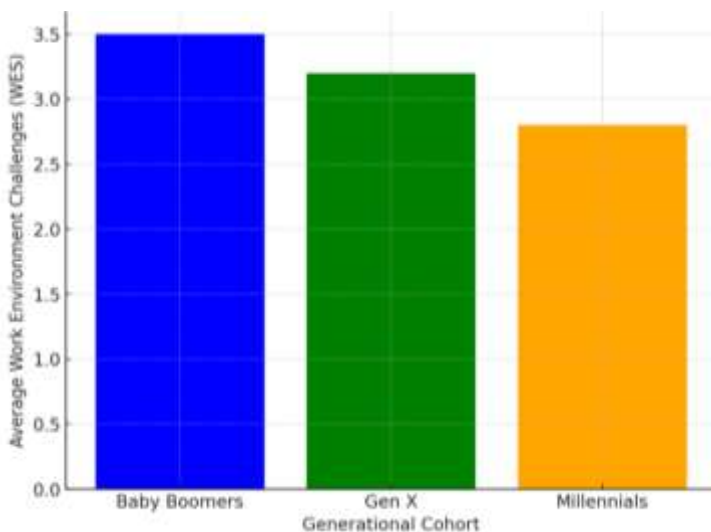


Figure 3: Bar Graph of Perceptions of Work Environment Challenges by Generational Cohort

Hypothesis 4: Psychological Flexibility as a Mediator Between Generational Differences and Perceived Stress

For the fourth hypothesis, present the results of the **mediation analysis** showing how **psychological flexibility** mediates the relationship between **generational cohort** and **perceived stress** (WES).

Table 5: *Mediation Analysis Results (Psychological Flexibility as Mediator)*

Path	B	SE	t-value	p-value	95% CI
Generation → Flexibility	0.28	0.15	1.87	0.06	[0.03, 0.61]
Flexibility → Stress	-0.36	0.14	-2.57	0.01	[-0.63, -0.09]
Indirect Effect (Generation → Flexibility → Stress)	-0.21	0.08		0.01	[-0.37, -0.07]

A mediation analysis was conducted to test whether psychological flexibility mediates the relationship between generational differences and perceived stress (measured by the WES). Using the PROCESS Model 4 by Hayes (2013), the results indicated that psychological flexibility significantly mediated the relationship between generational cohort and perceived stress, Indirect Effect = -0.21, SE = 0.08, 95% CI [-0.37, -0.07]. This suggests that generational differences impact perceived stress through psychological flexibility, supporting the hypothesis that older generations report lower stress due to higher psychological flexibility.

To further illustrate and confirm the findings presented above, the following figure provides a visual representation of the results.

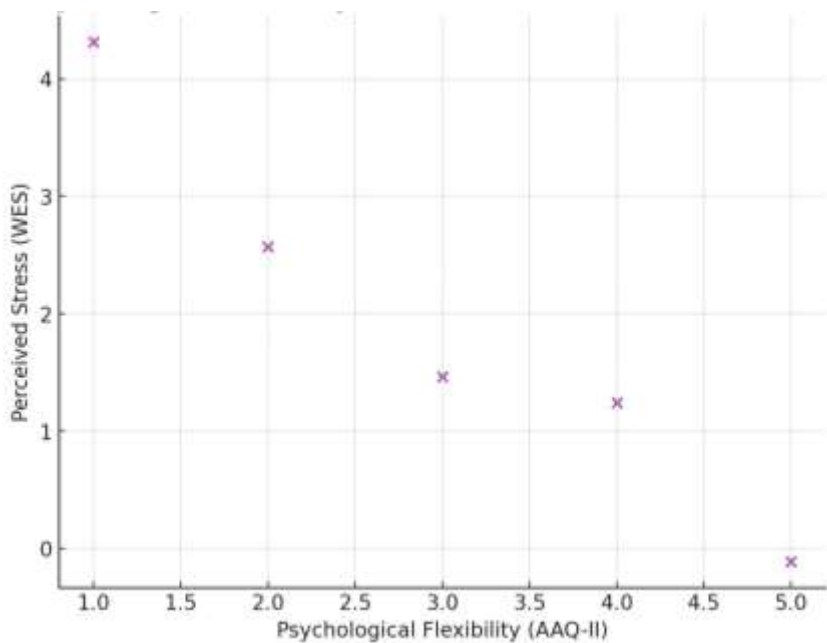


Figure 4: Mediation Model of Psychological Flexibility Between Generational Differences and Perceived Stress

Hypothesis 5: Relationship Between Psychological Flexibility and Job Satisfaction

For Hypothesis 5, use a **linear regression analysis** to examine the relationship between **psychological flexibility** and **job satisfaction**.

Table 6: Regression Results for Psychological Flexibility and Job Satisfaction

Predictor	B	SE	t-value	p-value
Psychological Flexibility	0.32	0.10	3.22	< 0.01

To test whether higher psychological flexibility is associated with greater job satisfaction, a linear regression analysis was performed with job satisfaction as the dependent variable and psychological flexibility (AAQ-II) as the independent variable. The results indicated a significant positive relationship, $B = 0.32$, $t(88) = 3.22$, $p < 0.01$, suggesting that employees with higher psychological flexibility reported greater job satisfaction. This finding supports the hypothesis that psychological flexibility enhances job satisfaction in dynamic work environments.

To further illustrate and confirm the findings presented above, the following figure provides a visual representation of the results.

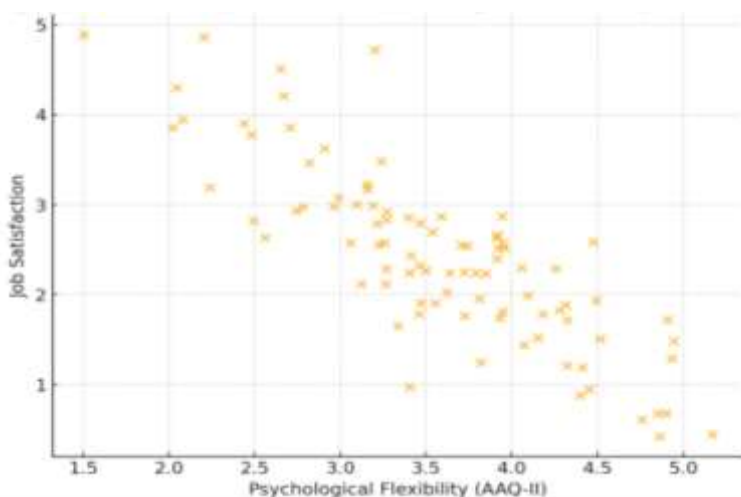


Figure 5: Scatterplot Showing the Relationship Between Psychological Flexibility (AAQ-II) and Job Satisfaction

Hypothesis 6: Interaction Between Generational Differences and Psychological Flexibility in Predicting Perceived Work Environment Challenges

For Hypothesis 6, use **multiple regression** to test the interaction between **generational cohort** and **psychological flexibility** in predicting **perceived work environment challenges**.

Table 7: *Regression Results for Interaction Between Generational Cohort and Psychological Flexibility*

Predictor	B	SE	t-value	p-value
Psychological Flexibility	-0.35	0.14	-2.50	0.02
Generational Cohort	0.25	0.17	1.47	0.15
Interaction (AAQ-II × GCS)	-0.15	0.07	-2.10	0.04

A multiple regression analysis was conducted to examine the interaction between generational differences (GCS) and psychological flexibility (AAQ-II) in predicting perceived work environment challenges (WES). The interaction term was significant, $B = -0.15$, $t(86) = -2.10$, $p < 0.05$, suggesting that the relationship between psychological flexibility and perceived challenges varies across generational cohorts. Specifically, younger generations with higher psychological flexibility reported fewer perceived work environment challenges compared to older generations.

To further illustrate and confirm the findings presented above, the following figure provides a visual representation of the results.

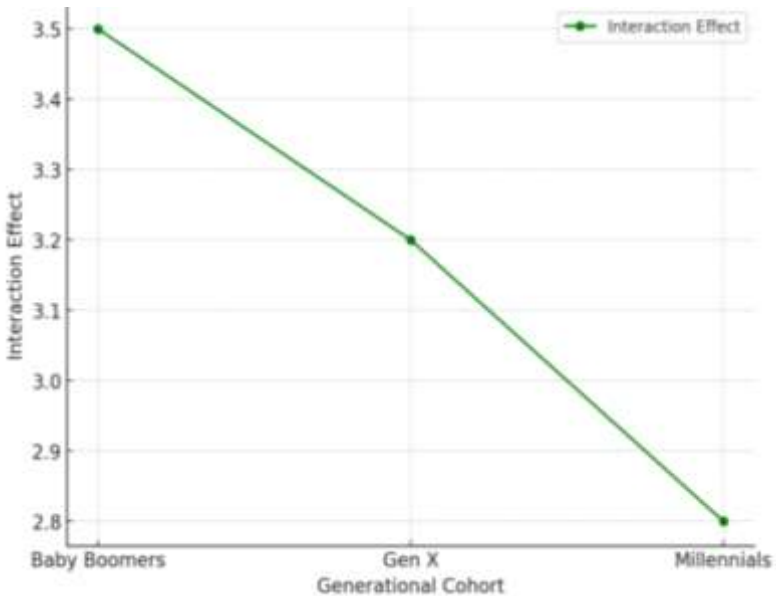


Figure 6: Interaction Plot of Generational Differences and Psychological Flexibility in Predicting Work Environment Challenges

Discussion and conclusion

The present study aimed to explore the interplay between generational cohorts, psychological flexibility, and perceptions of the work environment. Utilizing established measures – the General Cohort Scale (GCS), the Work Environment Scale (WES), and the Acceptance and Action Questionnaire-II (AAQ-II) – we examined six hypotheses concerning these variables.

Our findings indicate a significant negative correlation between psychological flexibility and perceived work environment challenges. This suggests that individuals exhibiting higher psychological flexibility, as measured by the AAQ-II, tend to perceive fewer challenges in their work environment.

This aligns with previous research highlighting the role of psychological flexibility in mitigating workplace stressors (Bond et al., 2011).

Analysis revealed significant differences across generational cohorts in their perceptions of work environment challenges. Notably, younger cohorts reported higher levels of perceived challenges compared to older cohorts. This finding is consistent with Twenge's (2013) assertion that younger generations may experience greater workplace stress due to evolving societal and occupational expectations.

The interaction between psychological flexibility and generational cohort was significant, indicating that the relationship between psychological flexibility and perceived work environment challenges varies across generations. Specifically, the protective effect of psychological flexibility against perceived challenges was more pronounced in older cohorts. This suggests that interventions aimed at enhancing psychological flexibility may need to be tailored to different generational groups to be most effective.

Further analysis demonstrated that psychological flexibility mediates the relationship between generational cohort and perceived work environment challenges. This mediation effect underscores the importance of psychological flexibility as a potential mechanism through which generational differences influence workplace perceptions.

These findings have practical implications for organizational development and employee well-being initiatives. Enhancing psychological flexibility through targeted interventions could serve as a strategy to reduce perceived work environment challenges, particularly among younger employees. Organizations should consider implementing training programs that foster

acceptance and commitment strategies to bolster employees' adaptability and resilience.

While the study provides valuable insights, it is not without limitations. The cross-sectional design precludes causal inferences, and the reliance on self-reported measures may introduce response biases. Future research should employ longitudinal designs and incorporate objective measures to validate and extend these findings.

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Sociology Between Objectivity and Ideology

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Abstract:

This article explores the relationship between sociology and ideology, focusing on the dialectical tension between connection and separation between the two concepts. This tension dates back to the emergence of sociology in 19th-century Europe, a period marked by an intense intellectual blend of three major ideological currents – conservatism, radicalism, and liberalism – that have continued to compete to this day. The birth of sociology was thus fraught with difficulty, as its historical trajectory has been tied to these ideological divisions from the outset.

At the same time, the founding sociologists sought to achieve objectivity as a necessary condition for the true emergence of sociology as a science, striving to liberate it from ideology and elevate it to the status of scientific knowledge comparable to that of the natural sciences. However, the relationship between sociology and ideology is marked by a certain complexity and specificity. Sociology uniquely studies and analyzes both the subject (researcher) and the object (researched), both of whom are influenced by various factors such as class affiliation, intellectual orientation, and social background. All of these are intertwined with a value system from which neither researcher nor researched can fully detach themselves, making them active participants in shaping research outcomes.

Between these two positions – the pursuit of objectivity and the acknowledgment of ideological influence – it becomes necessary to accept the principle of relativity in achieving full objectivity in sociology, especially given that even the natural sciences have not attained complete objectivity. Moreover, sociology cannot grow or reach epistemological maturity if it is employed in the service of specific social groups or classes. Rather, its true function lies in uncovering hidden phenomena and practices, whether healthy or pathological, in order to support the well-being and orderly development of human societies in response to social demand.

Keywords: Sociology, Ideology, Objectivity, Subjectivity, Relativity, Scientific Research

La sociologie entre objectivité et idéologie

Résumé :

Cet article explore la relation entre la sociologie et l'idéologie, en se concentrant sur la tension dialectique entre la connexion et la séparation entre les deux concepts. Cette tension remonte à l'émergence de la sociologie dans l'Europe du XIXe siècle, période marquée par un intense brassage intellectuel entre trois grands courants idéologiques - le conservatisme, le radicalisme et le libéralisme - qui ont continué à s'affronter jusqu'à aujourd'hui. La naissance de la sociologie a donc été difficile, car sa trajectoire historique a été liée dès le départ à ces divisions idéologiques.

En même temps, les sociologues fondateurs ont cherché à atteindre l'objectivité comme condition nécessaire à la véritable émergence de la sociologie en tant que science, s'efforçant de la libérer de l'idéologie et de l'élever au rang de connaissance scientifique comparable à celle des sciences naturelles. Cependant, la relation entre la sociologie et l'idéologie est marquée par une certaine complexité et spécificité. La sociologie étudie et analyse de manière unique le sujet (le chercheur) et l'objet (l'enquête), tous deux influencés par divers facteurs tels que l'appartenance à une classe sociale, l'orientation intellectuelle et le milieu social. Tous ces facteurs sont liés à un système de valeurs dont ni le chercheur ni l'objet de la recherche ne peuvent se détacher complètement, ce qui fait d'eux des participants actifs à l'élaboration des résultats de la recherche.

Entre ces deux positions - la poursuite de l'objectivité et la reconnaissance de l'influence idéologique - il devient nécessaire d'accepter le principe de relativité dans l'atteinte d'une objectivité totale en sociologie, d'autant plus que même les sciences naturelles n'ont pas atteint une objectivité totale. De plus, la sociologie ne peut se développer ou atteindre une maturité épistémologique si elle est employée au service de groupes ou de classes sociales spécifiques. Sa véritable fonction consiste plutôt à mettre au jour des phénomènes et des pratiques cachés, qu'ils soient sains ou pathologiques, afin de soutenir le bien-être et le développement ordonné des sociétés humaines en réponse à la demande sociale.

Mots-clés : Sociologie, idéologie, objectivité, subjectivité, relativité, recherche scientifique

Introduction

With the advent of modernity and the convergence of three major revolutions—the intellectual revolution heralded by the Enlightenment, the French political revolution, and the European Industrial Revolution—Western European societies underwent profound transformations on all levels. These changes had a direct impact on every domain, giving rise to a new societal model characterized outwardly by economic structures, yet driven at its core by a sweeping emotional current that penetrated all social and individual dimensions.

The emergence of these new phenomena generated an epistemological anxiety among thinkers in the human sciences, prompting them to seek understanding and explanation of these changes through one of the central principles of the modern era: reason. However, this could not be achieved through the existing social and human sciences of the time—such as philosophy, law, history, political science, and economics—which, although relatively clear in terms of subject matter and methodology, could only interpret these phenomena from limited and often technical perspectives. What was lacking was a comprehensive and integrative explanation that could unify insights from all disciplines within the field of human sciences.

It was not until the second half of the 19th century that thinkers finally arrived at this new science—sociology. This delay was not coincidental but rather the result of numerous factors and conditions that sociology itself would later come to explain. Nevertheless, the emergence and birth of sociology were not without significant challenges, particularly in terms of methodological rigor and scientific objectivity, especially concerning the tension between objective neutrality and ideological bias.

1. The Dialectic of Ideology and Objectivity in Sociology

The concept of ideology began asserting its presence within the field of human sciences in general during the second half of the 19th century, as scholars in Western societies came to recognize the fragility and inadequacy of the social, political, and economic reforms proposed at the end of the 18th and beginning of the 19th centuries. (Boudon, et al. 2023, 215) In sociology, however, the issue is more complex, as the nature of the relationship between ideology and sociology is contingent upon the discipline's existence as an independent science—one that asserts itself methodologically and objectively, being the epistemological form in which ideology is expected to recede.

Understanding sociological theory and the major schools of sociology requires a thorough grasp of the hidden ideological orientations embedded within them. Therefore, distinguishing between ideologically biased and objective, neutral theories demands a comprehension of the reciprocal influence between these theories and the lived social realities of individuals and groups. Ideology, thus, represents one of the central challenges facing sociology in its quest to attain scientific legitimacy—unlike the natural and technical sciences, where the ideology-objectivity dialectic is only marginally present. Despite early founders' acknowledgment of the differences between the natural sciences and the human sciences, they saw the role of science in the latter as uncovering contradictions—and by extension, ideology itself. Hence, sociology students must strive to understand the dynamic relationship between these two poles, which at times converge and at other times diverge.

The concept of ideology has occupied a significant and influential position in the field of social practice since the 18th century, beginning with the work of French thinker Antoine Destutt de Tracy, who treated ideology as synonymous with "psychology." With Karl Marx, however, the term took on a

more negative connotation, referring to the false consciousness humans develop about political and social realities. Yet Marx did not limit the concept to this pejorative sense; for him, ideology also involved rationalization and scientific argumentation. This aspect was later employed by Vilfredo Pareto in his theory of "derivations" (Boudon, et al. 2023, 215). Nonetheless, *"the term 'ideology' has become strongly associated with Marxism in the minds of many scholars, and their reactions to the concept are largely shaped by this connection. Therefore, it is important to acknowledge that although Marxism significantly contributed to the original framing of the problem, the term 'ideology' and its meanings predate Marxism and have evolved beyond it, acquiring new and independent dimensions over time"*. (Mannheim, 1980, 129)

Contemporary sociology treats ideology as a neutral concept referring to the set of ideas related to the political and social spheres, without necessarily presuming their validity or invalidity. Raymond Aron, for instance, described ideologies as "secular religions," rejecting all forms of determinism and adopting instead a conception of history that is shaped by a combination of chance and necessity. Similarly, Seymour Martin Lipset referred to these as *"total ideologies"* (Boudon, et al. 2023, 215).

Sociology, in its classical definition, is an attempt to secularize the study of society. During the great transformations experienced by Western societies in the 18th century, it shared a similar epistemological aspiration with the natural sciences prior to the European Renaissance—seeking knowledge through experience. However, sociology held an exceptional position among the human sciences. The core issue was embedded in the very first word of the term "social science": the notion of "science" itself, which is closely tied to the concept of objectivity. Through objectivity, sociology aims to assert its au-

tonomy, as its subject matter is presumed to impose itself on the researcher, just as is the case in the natural sciences. Earthquakes, for example, are natural phenomena that impose themselves on geologists; eclipses impose themselves on astronomers. Likewise, according to the founder of French sociology, Émile Durkheim, the sociological phenomenon is external to the will of individuals. The early debates centered on whether it was possible to achieve scientific neutrality in sociological research, detached from subjective influence as in the natural sciences. Could sociology liberate itself from subjectivity and commit to objectivity, or does it possess a unique nature that sets it apart from other sciences?

2. The Difficult Birth of Sociology

Sociology emerged from the epistemological anxiety experienced by the thinkers of the modern era, driven by a desire to understand the profound transformation that European Western societies underwent. This transformation gave rise to numerous new social phenomena that had not previously existed, necessitating attempts to diagnose them and provide appropriate solutions.

Although there is ongoing debate about the broad geographical origins of sociology, there is general agreement with the American sociologist Robert Nisbet that the 19th century witnessed the foundation of the sociological tradition through its key figures: Alexis de Tocqueville, Karl Marx, Max Weber, Georg Simmel, and Herbert Spencer. These thinkers indicate that the initial home of sociology was in Germany and France, due to a set of political and broadly defined cultural factors.

From a chronological perspective, sociology is a product of modernity, and its mission is to uncover the secrets of how this modern system functions in a society that has lost all external foundations (such as God, nature, or fate). Through sociology,

humans could be better equipped to control their own destinies. (Caban,&Dourtié, 2010, 80)

This was not an easy task, especially given the societal conditions in Europe and the nature of sociology itself. Like other disciplines in the human sciences, sociology sought to establish itself as an independent science. To achieve this, it needed to define a specific object of study and adopt a methodological framework that would distinguish it from other sciences – particularly those within the domain of the human sciences, as defined by Georges Gurvitch – despite the possibility of scientific cooperation and thematic overlap in explaining shared phenomena.

For the founding sociologists, defining the object of study depended on answering the following question: Can a society composed of independent individuals truly be considered a "society"?

The ideology of modernity had from the beginning shaped Western society into a mass of individuals, separated through individualism, freedom of expression and belief, human rights, equality, citizenship, the entry of women into the workforce, secularism, and so forth. Values became subject to personal decisions, or as Max Weber described it: a "polytheism of values."

Since society is the object of study in sociology, failing to offer convincing and solid justifications for this subject threatens the very existence of the discipline. Sociology also faced another, more complex challenge: the dialectic of detachment from and connection to ideology.

As a result, three major ideological-intellectual currents emerged and continue to contend with one another: The conservative current, represented by Auguste Comte. The liberal current, represented by Alexis de Tocqueville. A radical current,

represented by the French and German socialist schools. (Megherbi, 2006a)

Thinkers of the modern era realized that sociology faced certain difficulties compared to other sciences and had not yet reached scientific maturity, especially when compared to the natural sciences, which had already made significant progress despite having passed through phases of superstition and mysticism. Through this comparison, a sense of hope emerged among the early founders, particularly those who adopted the naturalist approach in sociological research. They were well aware of the challenge of modeling sociology after the natural sciences. Auguste Comte, for instance, classified sociology among the most complex sciences.

Similarly, interpretive and understanding-oriented thinkers (*Verstehende Soziologie*) criticized this initial approach, arguing that it was not possible to apply a unified methodology between sociology and the natural sciences. This is because sociology involves individual will and psychological dimensions, which makes causal explanations for observable practices less applicable or less reliable.

The French socialist school, beginning with Saint-Simon, and the German socialist school, especially with Karl Marx, were also highly aware of the difficulty of this endeavor. They recognized that numerous factors influence this science, including political factors, which posed the greatest obstacle to objective sociological thought. Saint-Simon, for example, could not free his intellectual work until Napoleon's defeat at the Battle of Waterloo in 1815, after which he was imprisoned by the British. Karl Marx, for his part, lived a life of exile, pursued by business owners and factory owners (the bourgeoisie). He was unwelcome in most European countries (Germany, Austria, France, Belgium, and England) due to his ideas and writings, which

threatened the very foundations of the capitalist economic system.

In addition to these challenges, European sociology initially failed to move beyond a theoretical framework, particularly in its early stages with Auguste Comte. This is something that American sociology—in what could be considered its third home—managed to overcome. The capitalist ideological orientation had a profound impact on American sociology, especially through the lens of pragmatism, which was adopted by the founding sociologists in the United States. They worked not only to analyze society but also to propose culturally tailored solutions within their specific societal system. After World War II, sociology in the U.S. increasingly focused on investigating social problems and assisting political authorities in implementing social reforms.

In this new context, sociology faced a different kind of difficulty, primarily stemming from efforts to shape it into a pragmatic science that would align with the political orientation of the ruling system—a trend that later extended into other fields such as economics, social life, and culture. In order to ensure its continuity as an academic discipline, sociology had to respond to increasing criticism directed at sociologists, especially in light of growing protest movements within factories and companies. These pressures even led to dismissals from academic institutions, as in the case of William Isaac Thomas. As a result, many sociologists abandoned reformist scientific discourse strategies and began seeking funding for research projects from sources independent of economically powerful institutions that aligned with the capitalist system and often lacked any regard for scientific objectivity.

Sociology also faced challenges directly related to ideological orientations. Marxist thinkers in the United States, for instance,

encountered significant difficulties accessing academic spaces. This was due to overt ideological bias, since most universities and research centers were funded by capitalists, such as the Rockefeller family, which financed the University of Chicago. Under such conditions, it became nearly impossible for radical thinkers like Thorstein Veblen (1857–1929) and Scott Nearing (1883–1982) to remain in academic settings. Due to their critical orientations, they were quickly marginalized and excluded from the academic world. (Duran, & Fayal, 2012, 237)

It was in this context that C. Wright Mills launched his criticisms of the American system. While he never openly declared himself a Marxist, he cleverly introduced non-ideological Marxist insights to understand and interpret American society as a system of needs and production controlled by a ruling elite. (Duran, & Fayal, 2012, 238) Despite his intelligence and careful avoidance of overt ideological bias, Mills himself faced considerable harassment and obstacles. Although his criticisms appeared methodologically grounded, they carried clear ideological dimensions, especially in contrast to Talcott Parsons, who blatantly ignored the historical dimensions of sociological phenomena.

Meanwhile, the Chicago School preferred the anthropological approach and monographic studies as a means to resist the dominant methodological model used by mainstream sociologists like Stouffer, Lazarsfeld, and Merton, whose work relied on quantitative data analysis (Duran, & Fayal, 2012, 287). At the same time, however, they also criticized qualitative research for its lack of methodological precision.

This dual origin of sociology in Germany and France, followed by a third foundation in the United States, represents in itself one of the major challenges sociology faced, due to cultural differences in social policies and the cultural specificity of each context. Nonetheless, sociology has managed to overcome

these obstacles through a long process of cumulative struggle, which enabled the discipline to make significant progress—progress closely linked to the profound transformations experienced by Western societies, at least since the 18th century.

3. Objectivity in Sociology

The first thing that often comes to mind regarding the concept of objectivity for many researchers is that it is opposed to subjectivity—in other words, objectivity is the opposite of subjectivity. This superficial definition indicates a lack of full understanding of the concept despite its importance in sociology. *Émile Durkheim* addresses the concept of objectivity as an essential condition for achieving independence in sociology as a discipline, as well as reaching advanced stages of epistemological maturity.

This can be summarized in three fundamental rules:

1. **Elimination of preconceived ideas**, which directly refers to the detachment from value judgments and subjective opinions that the researcher might hold about the phenomenon under study.
2. **Interpreting the social by the social**, which grants sociology independence in its interpretation and, consequently, its subject matter.
3. **Considering social phenomena as fixed things**, the goal of which is to emulate the method of natural sciences in order to reach the level of epistemological maturity they have achieved. This rule also combines the first two regarding the goal of achieving objectivity in sociology. (Durkheim, 1990, 162-190)

Max Weber gives objectivity a distinctive perspective by viewing it as an approach centered on understanding meaning and cautioning against the preconceived ideas of the natural

science paradigm. He continuously criticized the mistake of generalizing based on a single interpretative viewpoint, while acknowledging historical materialism without outright rejecting it. (Durkheim, 1990, 85) From this standpoint, Weber rejects the temptations presented by the natural science method, which assumes a unilateral knowledge of each isolated phenomenon, separated from all surrounding conditions. He adds:

"If it is established that knowledge without prior assumptions is meaningless in itself—that is, if the term is not an image formed with a prior assumption about objective events—then how can we guarantee scientific objectivity without falling into the absolute relativism of some historians?" (Duran, J. P., & Fayal, 2012, 87)

Regarding interpretation and understanding, the tradition of this school does not seek to establish autonomous laws but rather to reconstruct the understanding and subjective meaning of individuals' actions in order to interpret historical acts in their partial entirety. For example, to understand the French Revolution, one seeks to understand the meanings, representations, and values that various actors adhered to during their revolutionary path. (Lebaron, 2014, 10)

It is also worth noting a point of great methodological and epistemological importance—the subject matter is considered the essential condition for any science to achieve its independence. Despite the incorrect and ambiguous definitions presented in some sociology textbooks and publications (such as “objectivity is the opposite of subjectivity”), the founder of French sociology, Émile Durkheim, points out that objectivity is embodied in the principle of treating phenomena as fixed things and considering the social phenomenon as independent of the will of the individuals who produce it. For example, social investigation of a crime is usually conducted against the phenomenon itself, which it produced—just as natural phenomena

such as an earthquake impose their existence on the geologist, or an astronomical event such as an eclipse imposes its presence on the astronomer. The same applies to other fields of natural and technical sciences.

4. The Scientific Nature of Sociology

The existence of knowledge in ancient societies does not mean that it was science in the modern sense of the term, since the word "science" is generally attributed to the modern era starting from the seventeenth century onward. During this period in Western history, natural sciences began systematically applying observation and experimentation. Subsequently, social sciences, including sociology, attempted to emulate this approach or develop their own methodologies suited to the nature of sociological phenomena, beginning in the nineteenth century.

The main challenge faced by sociology, like other sciences, was the possession of an independent subject of study, alongside the attempt to apply observation and experimentation to social phenomena, while acknowledging that the researcher (the observer) is also part of the subject (the observed). Hence, the question arose: can human beings and society be studied in the same way as a physicist or biologist studies phenomena in a laboratory setting? Or do social sciences have unique characteristics that enable them to achieve scientific status apart from the natural sciences' methodologies?

Thinkers and scholars during the founding period were divided into two main positions:

- One position held that sociology was doomed or had reached a dead end due to several difficulties, notably subjectivity, ideology, the high complexity of individuals and groups, and the overlap with other disciplines

that hindered the establishment of a clear methodology to achieve scientific independence.

- Another position, represented by *Émile Durkheim*, sought to answer this challenge through comparing phenomena across time and space on both individual and collective levels, treating this comparison as a kind of "laboratory" for interpreting social phenomena.
- A third group focused on understanding social phenomena from their source — the individual who produces them, the "nucleus" through which societal behavior can be comprehended within the principle of social solidarity. Thus, social science falls within the category of cultural sciences, which concern themselves with human life events from the perspective of their cultural meanings.?"(Duran, & Fayal, 2012, 84)

Durkheim's comparison particularly concerns traditional versus modern Western societies, highlighting his concern with the phenomenon he called "anomie" — the loss of social anchors linked to the disintegration of society and social fabric. He viewed sociology as a means to better understand this threat and work toward mitigating its effects. (Caban,&Dourtié, 2010, 8)

Meanwhile, interpretive sociology, led by *Max Weber*, viewed sociology as a science whose task is to comprehend through the interpretation of social action,(Caban, &Dourtié, 2010, 48)Avoiding unilateral or deterministic social explanations. Society, according to Weber, is the product of individual actions driven by motives, reasons, and beliefs known only to the actors themselves. This is what Weber termed the "meaning" individuals assign to their actions.

With a methodology not far removed, the author of the Sociology of Forms, **Georg Simmel**, addressed many topics related to the stage of modernity, most notably the phenomenon of socialization, which he explained as a societal process involving the accumulation of factors and conditions, including history. He also studied a variety of phenomena that lie at the core of the transformations experienced by Western European society, such as fashion, money, migration, and the psychology of women.

The economic phenomenon, with its historical and political dimensions, was also strongly present as both a method and subject of study by a scholar who never once used the term "sociology" but is nevertheless considered one of its foremost figures. As Henri Lefebvre stated: "*Marx was not a sociologist, but sociology exists in Marxism.*" (Duran, & Fayal, 2012, 68) The sociological dimension in Marx's work is manifested in his emphasis on the necessity of linking theoretical questions with practical reality. For Marx, knowledge in the scientific sense cannot be realized except through demonstration and proof via organized practice, which he considered one of the foundations of dialectical materialism.

The sociology of knowledge according to Karl Mannheim is limited to scientific and technical knowledge. For example, the theory of relativity completely escapes reduction to class determinants. Mannheim studied sociology in terms of ideology, the humanities, epistemology, and scientific knowledge concerning nature. (Lebaron, 2014, 127)

Vilfredo Pareto contributed to elite theory and social circulation, analyzing political systems from social and political perspectives.

In the United States and England, sociology was largely marginalized, overshadowed by other sciences because it was

considered a cultural science lacking laws and rules. It was viewed merely as a tool to aid the study of other sciences such as economics. However, the perception of sociology changed rapidly after the establishment of the first sociology department at the University of Chicago in 1892, which marked the true beginning of the symbolic interactionist school in 1937 with figures like Herbert Mead and Herbert Blumer, followed by the second generation, including Howard Becker (studies on marijuana addiction), Anselm Strauss, Erving Goffman, and Harold Garfinkel.

The empirical works of Paul Lazarsfeld on the unemployed in Marienthal (1933) and his studies on marketing had a significant impact on the prestige sociology gained among major business leaders, such as the American private institution headed by the Rockefeller family.

The founder of human urbanism had a distinct methodology that preceded Western sociology by approximately five centuries by separating the subject of human urbanism from history, due to the great convergence and similarity between studying historical and sociological phenomena.

However, the scientific status of sociology remains to be proven in each society specifically. It may indeed be scientific in societies like Western ones, which generally treat it as an applied science helping the proper functioning (*le bon fonctionnement*) of both the subsystems and the overall societal system. On the other hand, in many developing societies, sociology is marginalized and remains confined to the walls of university classrooms, rarely leaving the realm of superstition or vague ideology. It suffers from a lack of genuine place and opportunity to advance effectively in understanding and interpreting the phenomena it produces.

This marginalization is due to numerous difficulties faced by these societies, including an inability to approach reality criti-

cally, the rigid and abstract application of Western theories that have little relevance to their contexts, and the consumption of concepts extracted from Western theories in various disciplines and sciences by intellectuals and politicians without adaptation to local realities.

5. Methodological Boundaries between Science and Politics

Considering the close relationship between ideology and politics—since politics is the tool through which ideological ideas are applied and implemented—the variables that can explain the status of sociology in any society are tied to the nature of the relationship between these two concepts within sociology.

If natural sciences are a means for humans to achieve control over nature, then social sciences represent an effective tool for achieving control over humans and society. Hence, it is not surprising that social forces holding political power seek to impose their influence directly or indirectly over institutions responsible for producing and disseminating knowledge. Such control integrates these institutions into the existing regime's project, making them indispensable tools for gaining legitimacy on one hand, and providing the regime with the necessary expertise to achieve its goals at various levels on the other. (Anser, 1999, 282)

Marx believed that the humanities represent a form of knowledge in which ideology hides, in contrast to the natural sciences, which are characterized by precision, objectivity, and the ability to reveal truth free from ideological distortion. At the same time, the role of the humanities is to expose all contradictions and distortions of truth produced by ideology in reality and thought. (Khazzar, 2013, 68)

Meanwhile, Karl Mannheim argued that knowledge in the social sciences has not yet succeeded in breaking free from nar-

row interpretations and class-based viewpoints specific to certain groups. Therefore, freeing knowledge from ideology is the task of intellectuals who can transcend one-sided views and express the full truth. Some scholars and thinkers, such as Raymond Reis, acknowledge the coexistence of both sides – science and ideology – within researchers and scholars in the humanities and social sciences. Consequently, a politician can also possess both the ideological-political and objective-scientific aspects. Reis considers the former as a professional commitment aimed at upholding the ethics of scientific research and following a clear, neutral, and objective methodology, without implying the delivery of content with predetermined specifications. This sets the stage for the second aspect: ideological commitment, which involves belief in an idea or set of ideas that go beyond the existing truth and reality. This allows the researcher to be identified by their affiliation and particular perspectives on their worldview. (Khazzar, 2013, 69)

Max Weber's contribution in clarifying the relationship between these two concepts is both precise and clear. In his book *The Scientist and the Politician* (Le Savant et Le Politique), Weber delineates the boundaries between the two professions. He argues that the scientist contributes to shaping the destiny of our rational era by rationalizing the world and freeing it from magic, thereby preventing confusion between controlling the world through technology and the value-laden aspect of culture, which he described as a "struggle of the gods." (Duran, & Fayal, 2012, 99) Even though the scientific practice and its institutions, such as universities, do not deny the political objectives of social sciences – especially sociology – Weber defined the relationship between the two functions: a sociologist can become a politician but cannot maintain the scientific spirit and intellect he once had, nor can he practice the profession of a scientist at the same time.

IbnKhalidun preceded Western sociology in defining the proper relationship between the politician and the scientist with a statement that can be considered a law of this relationship in the strictest sense: "*Scholars among humans are the furthest from politics and its sects.*" (Megherbi, 2006b, 85)

He mentioned this in the *Seven Errors* committed by historians in writing history, specifically the error of bias towards opinions and sects, and currying favor with those in power through praise and flattery. This falls within the domain of research integrity. According to IbnKhalidun, it is impossible for any historian to be objective and neutral, far from subjectivity and independence; the same applies to the scientist who cannot simultaneously practice the function of knowledge production, especially in the fields of human and social sciences.

Therefore, sociology is considered an extremely complex science. On the surface, it may seem simple and accessible to everyone, but mastering its practice effectively and beneficially requires significant effort—going back to its history, theories, methodologies, techniques, and concepts. Its delayed emergence in the West was not coincidental but the result of a range of factors. However, sociology eventually managed to assert itself to varying degrees from one society to another. Its presence as a science also varies depending on the group, party, or class that controls it.

In other societies, including Arab and Maghreb societies, despite the sociological foundation left by the scholar Abd al-RahmanIbnKhalidun since the 14th century, no distinct Khalidunian school has been established to this day. Especially when considering the tremendous global transformation currently underway—in terms of ambitions and aspirations on one hand, and wars and clashes between states and civilizations on the

other — these societies cannot afford to ignore sociology, which in the West has become indispensable knowledge.

Conclusion

The journey of sociology was marked by a unique path of emergence and development in Western societies compared to other sciences. Its launch was very difficult, similar to other related sciences often referred to as human sciences. Sociology experienced a crisis concerning its scientific status, with some believing it was aborted and could never reach cognitive maturity. It also faced division due to its relationship with ideology, which was imposed upon it by social, economic, and political circumstances surrounding it. These conditions produce an ideology that cannot be easily shed; thus, one camp labeled social and human sciences as “ideological sciences.”

The opposing camp believes it is possible to overcome preconceived ideas and value judgments through a scientific methodology that leads to objectivity. Between these extremes, sociology has proven its independence in terms of subject matter. Numerous sociological studies have yielded remarkable results in Western societies, where sociology has become a pragmatic science serving direct social demands. Nevertheless, it cannot be claimed that sociology is absolutely independent from ideology or fully neutral. Likewise, ignoring value neutrality and neglecting the ethical dimension in sociological studies and research is not possible — since the subject of sociology is not a static object, unlike subjects in natural sciences, which can be experimented on repeatedly without harm to either researcher or subject.

If sociology aims to reach scientific maturity, it must adhere to the fundamental principles agreed upon by its early found-

ers despite their methodological and ideological differences. They viewed society as an entity independent of the individual that imposes its authority on individuals. Therefore, the subject matter of sociology exists and is independent of other disciplines. What remains decisive is whether sociology is applied well or poorly, as this determines its role and function in society.

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Importance of Archaeological Sites and Their Role in the Development of Tourism in the Province of Khenchela

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Abstract:

Archaeological sites play a vital role across various fields, including scientific, artistic, and historical domains, and are crucial aspects of the economic dimension. Among the most notable regions distinguished by a high density of archaeological remains is the province of Khenchela, whether in its northern, central, or southern parts. The province's heritage sites possess significant scientific and historical value, particularly in the region's collective memory. Despite their immense value, the current state of these sites is catastrophic: a considerable portion are vulnerable to looting, theft, and destruction. The region's richness at archaeological sites holds great potential for attracting visitors nationwide. Therefore, it has become essential to consider both the preservation of these archaeological assets and their integration into the tourism sector by incorporating them into local development plans as an economic resource contributing to societal progress. This approach aligns with the priorities of many tourist-oriented countries around the world. The state has attempted to capitalise on the significance of its antiquities in Algeria, and the province of Khenchela is among those striving to do so. Hence, it is imperative to conduct theoretical and practical studies of the province's archaeological sites and explore viable strategies for leveraging them within the tourism industry.

Keywords: Archaeological Sites; Tangible Heritage; Tourism Development; Memory; Laws and Legislation; Antiquity Trafficking.

Importance des sites archéologiques et leur rôle dans le développement du tourisme dans la province de Khenchela

Résumé :

Les sites archéologiques jouent un rôle essentiel dans divers domaines, notamment scientifique, artistique et historique, et constituent des aspects cruciaux de la dimension économique. La province de Khenchela, que ce soit dans sa partie septentrionale, centrale ou méridionale, est l'une des régions les plus notables qui se distinguent par une forte densité de vestiges archéologiques. Les sites patrimoniaux de la province possèdent une valeur scientifique et historique importante, notamment dans la mémoire collective de la région. Malgré leur immense valeur, l'état actuel de ces sites est catastrophique : une partie considérable est exposée au pillage, au vol et à la destruction. Il est donc devenu essentiel d'envisager à la fois la préservation de ces biens archéologiques et leur intégration dans le secteur du tourisme en les intégrant dans les plans de développement locaux en tant que ressource économique contribuant au progrès de la société. Cette approche s'aligne sur les priorités de nombreux pays à vocation touristique dans le monde. En Algérie, l'État a tenté de capitaliser sur l'importance de ses antiquités, et la province de Khenchela est l'une de celles qui s'efforcent de le faire. Il est donc impératif de mener des études théoriques et pratiques sur les sites archéologiques de la province et d'explorer des stratégies viables pour les mettre en valeur dans l'industrie du tourisme.

Mots-clés : Sites archéologiques ; Patrimoine matériel ; Développement touristique

Introduction

Archaeological sites represent all the tangible remnants passed down through generations, whether immovable or movable, preserved by public or private entities. These assets can serve as sources of economic return, especially given Algeria's wealth of tangible heritage. Archaeological landmarks are considered cultural treasures and pillars of alternative economic development in Algeria. Thus, responsible authorities must pay attention to preserving, maintaining, and promoting this tangible heritage.

In light of the above, the central research question of this study is as follows:

What is the importance of archaeological sites in the province of Khenchela, and what role do they play in promoting tourism, advancing development, and highlighting the identity of the society in Khenchela?

The present study aims to highlight the significant role that archaeological sites can play in achieving sustainable development in the tourism sector in Algeria in general and in the province of Khenchela in particular. With all its dimensions, this authentic civilisational heritage can contribute meaningfully to sustainable cultural, social, and economic development. It can also support economic development, as cultural heritage constitutes a vital asset for fostering social balance and safe transformation while serving as a source of strength through its productive activities that sustain the livelihoods of local communities.

Furthermore, cultural heritage is a fundamental element and reference point in the tourism industry, encompassing architectural, artistic, civilisational, and cultural components. It can offer substantial contributions and is crucial to society's sus-

tainable development. This study adopts theoretical and practical approaches, including field visits and analyses of the studied sites.

Regrettably, this subject has not received adequate attention from either Western or Algerian researchers. The province of Khenchela remains a largely unexplored area that urgently requires genuine historical and archaeological research conducted by specialists in the field.

1. Local Tangible Heritage of the Province of Khenchela and Methods of Its Preservation

1.1. Importance of Archaeological Sites in the Province of Khenchela

As archaeological sites represent the living historical memory of people and preserve their identity and sense of belonging (Al-Zahrani, 2008, p. 272), they form a vital link between the past and the present. They are an inseparable part of a person's memory, history, and identity (Mestawi, 2011, p. 3). Algeria, in general, and the Khenchela region, in particular, are rich in archaeological sites located in its northern, central, and southern parts, spanning from the prehistoric era in its various stages to the protohistoric period, the beginnings of recorded history, and, through the Phoenician era, the Roman period. One also finds remnants of the Byzantine presence, followed by the Islamic period in its multiple phases, the Ottoman era, and the French colonial period.

The importance of these sites lies in the following:

- They serve as tangible evidence that aids researchers in studying the evolution of the civilisations that have passed through the region.
- The region's rich and distinctive tangible heritage represents a local and national treasure bequeathed by past generations. Many of these sites in the province of

Khenchela have been preserved in good condition; however, recently, they have been subjected to looting and unauthorised excavations, affecting nearly all the sites.

- Tangible heritage allows for the promotion and recognition of the region, especially when the archaeological sites hold great value. The province of Khenchela is home to numerous sites of immense importance, representing various historical periods from prehistory to the colonial era. These sites are distributed across the entire province's territory.
- If archaeological sites are appropriately utilised, they can generate substantial revenues, particularly for residents living near them and tourism agencies within the province. Moreover, they have the potential to attract foreign tourists who bring with them foreign currency, thereby contributing to an increase in the state's foreign exchange income (Haji, 2018, pp. 139–140).
- Furthermore, archaeological sites constitute a key and pivotal factor in sustainable development.

1.2. Factors Leading to the Loss, Decay, and Disappearance of Antiquities in the Province of Khenchela

The loss of antiquities can be attributed to two primary factors:

1. **Natural** factors include earthquakes, floods (Giorgio, 1986, p. 32), lightning, wind erosion, volcanic activity, fluctuations in temperature, thermal expansion, humidity, and other natural phenomena.
2. **Human Factors:** Human activity, whether intentional or unintentional, can cause significant damage to tangible heritage, especially immovable heritage (Al-Banna, 2022, p. 32). Wars between nations, such as the invasion of Iraq, as well as internal conflicts and civil wars, such as

those witnessed in Algeria during the 1990s and those currently occurring in several Arab countries, represent some of the most dangerous threats to the preservation of archaeological heritage. Urban and economic development and the implementation of national infrastructure projects also heavily burden archaeological sites (Qaddous, 2003, p. 248).

While natural causes are often beyond human control, certain types of human-induced damage can be addressed. These include deliberate actions, such as extracting stones from archaeological sites for use in construction, and inadvertent harm resulting from a lack of awareness and archaeological sensitivity.

For example, in the village of Tabardqa, residents have used scattered archaeological finds from nearby sites in construction. Stones have been reused in buildings, and some artefacts have been placed in courtyards and doorways for decorative purposes, leading to the loss of many original site elements. This same phenomenon is observed at numerous archaeological sites in Oued Bagra, which is located in the municipality of Charef. In the villages of Taghit and Zawiya, many stones, particularly from the Roman period, have been reused, some of which bear inscriptions or depictions of animals. This has considerably impacted the archaeological sites, resulting in the loss of important structural components.

It is impossible to assign a monetary value to antiquities, regardless of their type or the historical period to which they belong. For this reason, all nations must work diligently to protect their archaeological sites and all they contain. One effective means of doing so is activating the tourism sector and attracting visitors by promoting heritage and its symbolic, historical, artistic, and mythical dimensions, for example, by organising exhibitions (Moqaddam, 2020, p. 156).

Many experts in archaeology attribute the theft and loss of a vast number of artefacts, statues, and coins at various archaeological sites across Algeria in general and in the province of Khenchela in particular to the absence of even the minimum international standards for the protection of antiquities, as stipulated by numerous international laws and conventions.

Most smuggling and theft operations have occurred through eastern Algeria, transporting the artifacts to Tunisia. Owing to its proximity to the Tunisian border, these operations are carried out by professional networks that possess detailed knowledge of Algeria's archaeological sites, specifically those of the province of Khenchela. Moreover, most thefts from museums follow the same *modus operandi*.

The absence of awareness and a sense of responsibility towards our history, embodied in the scattered antiquities throughout the region, is among the most significant factors leading to the erosion of people's collective memory. Consequently, the failure to preserve the numerous archaeological remains dispersed across the province of Khenchela has hindered the utilisation, development, and promotion of the tourism sector in these historically rich areas. Numerous examples of this neglect can be found throughout the province, in the north, in the centre, and south.

One such example is the site of Baghai, which is considered among the most renowned archaeological sites in the province and across Algeria. Its fame is attributed primarily to the legendary Amazigh leader *Dihya al-Kahina*. However, the archaeological remains throughout the site suggest that the city is much older. Several lithic artefacts discovered at the site date back to the Palaeolithic period, whereas several others point to its importance during the Numidian era and, more prominently, during the Roman period (Al-Idrissi, 1989, p. 156). Moreo-

ver, the site gained increased importance during the Islamic conquests of the Maghreb (Gsell, 1911, p. 28). (*See Map 1*)

Visitors to this site cannot help but notice the neglect and indifference shown towards archaeological sites in the province. Although the state has erected a wall around part of the site, the more significant portion remains exposed to looting, pillaging, and unauthorised excavations, all of which have significantly contributed to the loss of invaluable archaeological artefacts. Additional artefacts have been discovered by chance either during the construction of dwellings by local inhabitants or through agricultural activities. Regrettably, all such discoveries have been sold to parties unrelated to the Ministry of Culture. As a result, a part of the region's and the nation's identity has been irretrievably lost.

The sites of Zawiya and Taghit, located on the banks of Oued Bagra in Chéchar, have also been subjected to extensive looting, theft, and destruction. They have fallen victim to illegal excavations by antiquities smugglers and treasure hunters. These illicit activities have led to the demolition and destruction of substantial portions of the sites and have stripped them of valuable historical information. (*See Map 1*)

Moreover, one cannot overlook the numerous archaeological sites situated along the banks of this river, which have endured widespread looting and destruction. These include, but are not limited to, Meziane, Taghit, Chir Amrane, Zawiya, El-Amra, and El-Wendoura villages. All these locations contain dozens of archaeological sites, particularly from the Numidian and Roman periods, most of which have been targeted by antiquity traffickers.

The Taronset site is among the most prominent archaeological locations in the southern part of the province and is situated within the jurisdiction of the municipality of Chéchar. Most of its remains are either Roman or Byzantine, although one must

also acknowledge the presence of local Numidian architecture. The site covers a relatively large area compared with other sites in the province's central and southern regions. It contains a significant number of scattered artefacts across its expanse. This high density of remains has attracted the greed of looters and antiquities traffickers, making the site vulnerable to uncontrolled and unlawful excavations by treasure hunters.

These unauthorised digs have resulted in the loss of large portions of the site, particularly inscribed stones bearing Latin texts and coins, which constitute one of the most important material sources for historical reconstruction. (*See Image 01 and Map 01*)

Image 01 : *Title: Archaeological Site of Taronset*



Source: Photograph by the researcher.

Several other archaeological sites have also been subjected to looting and destruction, including several sites in the municipality of **Djellal**. In addition, one must not overlook the **Tibaaal-in site** in the municipality of **Khiran**, which was officially classified as a national heritage site in **2024**. In the **central regions** of the province, specific sites in the municipality of **Babbar** have also been affected. For the **northern regions**, the situation is even more dire: nearly all sites have been excavated illegally, including **Ras Metoussa**, **Hammam Leknif**, and various sites in the municipalities of **Ouled Archach** and **El-Mahmal**, as well as others in **Bouhmama**.

These findings indicate that **most archaeological sites in the province of Khenchela** are vulnerable to looting, theft, and the trafficking of significant artefacts beyond national borders. **This has resulted in the loss of vital elements of our local history and identity**, which are integral to Algeria's national heritage. This brings us to another critically important topic: **protecting archaeological sites**.

1.3. Protection of Tangible Heritage and Archaeological Sites in the Province of Khenchela

The Algerian state, represented by the Ministry of Culture, has dedicated significant efforts to protecting tangible heritage, particularly archaeological sites. Various programmes have been established for this purpose, especially from **2002** to the present, with substantial financial resources allocated. These initiatives have successfully protected and restored many archaeological sites at risk of complete disappearance. Moreover, several neglected and forgotten sites have been rehabilitated and brought back to the national focus. The issue of safeguarding archaeological sites has become a pressing concern, commanding attention in discussions at multiple levels and receiv-

ing substantial deliberation within state institutions and among civil society organisations (Mejdoub, 2022 & Zerfa, p. 224).

Antiquities represent the **historical memory of nations**, and their protection is thus imperative. The province of **Khenchela** contains many archaeological sites, making it a strong candidate for becoming a **tourist hub** and destination for visitors. These monuments represent the cultural wealth from which the region could greatly benefit. Algeria has made concerted efforts to preserve its archaeological heritage, acting within international legal frameworks established by bodies such as the **United Nations Educational, Scientific and Cultural Organisation (UNESCO)** and the **International Council on Monuments and Sites (ICOMOS)**.

At the national level, Algeria has enacted several legislative texts to preserve and regulate the use of its archaeological assets. Among the key legal instruments are **Ordinance No. 66--62**, dated **4 Dhu al-Hijjah 1358 AH/26 March 1966**, concerning **tourist zones and sites**. This was followed by a series of decrees and laws, the most significant of which is **Law No. 98--04**, dated **20 Safar 1419 AH/15 June 1998**, which pertains to the **protection of cultural heritage** (Belkacem, 2023, pp. 249--263).

The state must protect historical monuments and archaeological sites by all means, including material measures such as maintenance, restoration, monitoring, security protection, and preventive strategies. It is also essential to raise public awareness about antiquity's significant role in reflecting a society's identity, culture, and authenticity (Moqaddam, 2020, pp. 156--158).

Antiquities are among the most vital assets of a nation, possessing historical, religious, and cultural value that necessitates protection and enhancement (Ashraf Saleh, 2009, p. 51). They must be considered a **national security priority** and should

never be left outside the purview of government oversight and protection. These antiquities hold immense significance in people's lives, forming a key part of understanding historical movements and humanity's connection with nature and life. While most material losses can be recovered or replaced, the loss of archaeological artefacts is **irreparable**, with consequences that affect not only a specific period but also the entire course of history and the future.

Raw materials also carry exceptional scientific and artistic value and represent national interest from archaeological, historical, and cultural perspectives. Their importance contributes to the memory and identity of our national heritage.

The key recommendations include the following:

- Educating **children** about antiquities and their vital role in the life of nations.
- Raising awareness among **local populations and authorities** about the importance of archaeological sites and their key role in development.
- **The** antiquities of neglect and isolation should be preserved, and **the antiquities should be transmitted to future generations** in respectful and well-maintained conditions.
- Employing professionals in the tourism and cultural sectors who specialise in archaeology has proven essential. This has indeed taken place within the cultural sector of the province of Khenchela in recent years, resulting in a marked improvement compared with that in the past. Despite their small number, these young archaeologists have made significant contributions to **preserving and promoting** parts of the province's tangible heritage.
- Building **museums** in all regions and provinces of the country that contain archaeological sites is crucial. For example, the **Chéchar region** in the province of

Khenchela is known for its **archaeological density and diversity**, with sites dating back to the **Palaeolithic period**; the **protohistoric era**; and the **Numidian, Roman, Byzantine, and Islamic periods**. This area needs a museum, even a modest one, to safeguard the numerous artefacts scattered across its various sites.

- **Activating the fundamental role of associations** is equally important, as they have become among the most vital structures in societies characterised by high levels of civic engagement. These associations are pillars of cultural and ideological belonging, strengthening social identity. Their fundamental role concerning heritage is to **participate in promoting and protecting antiquities**.
- **Modernising information systems** by ensuring continuous training for professionals working in the heritage and tourism sectors.
- **Enforcing legislation** protecting heritage materials is also imperative to strengthen the **legal framework for safeguarding antiquities** (Mohamed Hamed, 2021, pp. 68-73).

2. The Role of Archaeological Sites in Local Development and Preservation of Identity

2.1. The Touristic Dimension of Archaeological Sites in the Khenchela Region

Civilisational landmarks have been among the most important elements attracting tourists since ancient times. According to a 2023 report by the **World Tourism Organisation**, historical and archaeological monuments have gained a prominent position within the global economic system, rivaling even key industries such as telecommunications (Ben Zghadi, 2016, pp. 10-11). All the antiquities spread across Algeria, particular-

ly in the Khenchela region, constitute a valuable resource and a strong foundation for attracting tourism. This type of tourism is commonly referred to as **heritage tourism**.

Antiquities are among the most vital assets of a nation and must be considered a priority on the **national security agenda**. They should not be left without oversight and protection by authorities, as they hold immense value in the lives of nations. It is therefore essential to revitalise and promote tourism at archaeological sites, as such efforts contribute to the **maintenance and restoration** of these monuments, ensuring their preservation. Their continued existence safeguards historical memory, since monuments serve as material witnesses to the history of any given nation. Thus, every individual should be responsible for preserving any archaeological object they encounter because it forms part of our **national identity** (Haj Gouider, 2019, p. 25).

Today, tourism has become one of the fundamental pillars supporting and developing states' financial resources. It also plays a clear role in advancing **political, economic, cultural, and social development**. For these reasons, those responsible for this sector must **prioritise it**.

Archaeological sites and historical landmarks, which are spread across numerous municipalities in the province of Khenchela, represent some of the most significant tools for developing and revitalising the tourism sector. This necessitates investment in these treasures, their effective utilisation, and efforts to ensure their protection, restoration, and maintenance. Additionally, it is crucial to raise public awareness of their value, emphasising that they constitute a **permanent resource** capable of contributing to **sustainable development** and serving both the national and local economies, provided that they are exploited through a scientific approach guided by marketing strategies and targeted tourism development programmes.

These antiquities serve as genuine reflections of a nation's civilisational depth.

The Khenchela region is rich in **tangible heritage**, representing diverse historical periods and civilisations, from the **Palaeolithic age** to the present. These traces, left throughout human history, can be powerful tourist attractions. Their effective promotion could **revitalise the local economy, create job opportunities**, and increase **investment prospects** for residents, particularly **youth**, who represent a high percentage of the population affected by unemployment.

- The arrival of large numbers of tourists to the region can generate significant **revenue for the provincial treasury** and the municipalities housing these sites, benefiting the **local population living near them**.
- The province enjoys remarkable **natural diversity**, comprising mountainous, forested, and desert areas, which allows for the development of **diverse tourism offerings**, including archaeological tourism.
- The **promotion and media marketing** of archaeological sites and the introduction of local heritage, such as traditional customs and practices, are essential to elevating the region's touristic profile.
- The province is known primarily for its agricultural character, with most of its revenues derived from this sector. However, if the tourism sector were to be developed, it would provide an **alternative source of income** beyond the primary economic base.
- Municipal treasuries housing archaeological sites would benefit from **tax revenues** from tourism-related activities, such as **hotel services, restaurants**, and other associated enterprises.

- **Archaeological tourism** contributes to reducing unemployment by creating both **permanent and temporary job opportunities**.
- Promoting **traditional crafts** is also enhanced through direct interaction between **local artisans and visitors of various nationalities**. This allows the selling of a wide range of local artisanal products, such as the **Babbar rug**, traditional jewellery crafted in different municipalities, and miniature models representing regional heritage. These sales **increase financial revenues** for the region and its inhabitants.

In light of the above, the **immense cultural and archaeological wealth** of the province of Khenchela could serve as a powerful driver of development, **provided that appropriate care and attention are given to its tangible heritage and archaeological tourism**. In such a case, these resources could become a **significant alternative source of revenue** for the province and the communities neighboring the archaeological sites.

2.2. Key Measures for the Development of Archaeological Tourism in the Khenchela Region

An archaeologist can contribute significantly to the tourism sector beyond their primary role in excavating, documenting, and restoring antiquities. By applying their expertise, they can help enhance the economic value of heritage and promote the development of archaeological tourism in the Khenchela region. This can be achieved by raising awareness and redefining antiquities not merely as artefacts of historical and cultural value but also as symbols of national history and expressions of collective identity.

1. Integrating heritage education into school curricula will increase children's awareness at the primary and middle

school levels about the importance of tangible heritage in all regions of the country.

2. Cultural sector officials in the province of Khenchela should organise open heritage days in museums or archaeological sites, especially during cultural occasions such as Heritage Month. A notable example is the Museum of the Martyr Brothers Boulaaziz, which has played a key role in showcasing the province's rich tangible heritage through active engagement and public education efforts in recent years.
3. Unfortunately, no official archaeological excavations were recorded in the province of Khenchela before 2024, despite the region's high archaeological density and rich diversity (Bouhouche, 2017, p. 4). However, in June 2024, excavation work began at the site of Baghai, led by the National Centre for Archaeological Research, following a personal initiative by the Minister of Culture and the Arts.
4. Heritage associations, particularly those focused on archaeology, have substantially promoted awareness of archaeological sites and protected certain artefacts from damage and theft. In recent years, many such associations have emerged across various municipalities in the province, with a general mission to safeguard heritage.
5. Preparing archaeological sites to receive visitors and encouraging private investment in this promising sector is essential (Al-Banna, 2002, p. 27). In the Khenchela region, there has been a notable delay in realising some tourism projects. Nonetheless, the additional budget allocated by the President of the Republic, Mr. Abdelmajid Tebboune, includes several important initiatives in this field.

6. Most archaeological sites are located in remote areas, making the construction of access roads essential. Local authorities are responsible for this task. A notable example is the removal of isolation surrounding the Tizgrarin site, which is located approximately 20 kilometers from the municipality of Chéchar in extremely rugged terrain. Local authorities successfully constructed paved roads, significantly improving accessibility to the site.
7. Providing archaeological sites with trained specialist guides is necessary, and partnerships between the Ministry of Tourism and the Institute of Archaeology for the professional training of tour guides can achieve this goal. This remains a critical shortfall in the province of Khenchela.
8. Relevant stakeholders must pay attention to and preserve colonial-era heritage, as a significant portion qualifies as archaeological heritage. Authorities in the heritage sector should also establish collaborative relations with the Ministry of Mujahideen (War Veterans). Many sites from the colonial period still exist, including watch-towers, fortresses, prisons, and colonial towns, notably in Khenchela, which served as the headquarters of the First Historical Wilaya, and in the historic fortress of Tabardqa, among many other sites.
9. Investment in traditional industries is also crucial, as it plays a significant role in supporting the development of the tourism sector nationally and in the province of Khenchela. Moreover, they reduce unemployment in areas adjacent to archaeological sites and generate income for artisans.
10. Establishing a tourist infrastructure, such as hotels, inns, and restaurants near archaeological sites, is essential to ensuring comfort and convenience for visitors. This

should be accompanied by providing transport, security, healthcare, warm hospitality, fast and high-quality service, and affordability, all of which contribute to tourist satisfaction and encourage repeat visits (Bousanboura, 2021, p. 123). The state has allocated a significant financial budget to develop tourism facilities to achieve this objective. It has encouraged private sector involvement in significant projects to attract the maximum number of domestic and international tourists.

11. It is imperative to raise public awareness about the value of antiquities and archaeological sites and their role in the economic sector. Citizens must feel a sense of responsibility toward this tangible heritage. Their active participation in governmental and community-based heritage protection committees and institutions will further contribute to the sensitisation of the population.
12. The media plays a pivotal role in fostering cultural tourism awareness within society. This is particularly crucial given that interest in archaeology is relatively new in Algeria, and most specialists are recent graduates. Dedicated programs and campaigns must be developed and broadcast through various platforms, including audio, visual, print, and social media networks (Jaabel, 2012, p. 15).

2.3. The Role of Archaeological Sites in Preserving Identity in the Khenchela Region

Archaeological sites play a significant role in preserving the identity of nations. They hold immense value and importance for future generations across all countries (Cheniti, 2013, p. 169). In developed countries, historical landmarks, archaeological sites, and museums have been surrounded by great care

and attention. Over time, they have become a primary resource for academic studies and research across various fields of knowledge and science. Beyond their scholarly value, they also offer cultural enrichment and recreational experiences, providing visitors with aesthetic enjoyment and access to the profound artistic and intellectual meanings embedded in these monuments, some of which are truly astonishing in their rarity and complexity.

Advanced nations have come to understand the depth and significance of archaeological heritage as a cultural phenomenon and a civilisational product that preserves the identity of communities, states, and civilisations. It has historical, educational, and recreational dimensions and is key in shaping national consciousness.

The Khenchela region stands out nationally in terms of archaeological density and the diversity of civilisations that have left their mark on it. It is one of the most prominent Numidian regions and is known for resisting successive colonial powers and preserving a rich tangible and intangible heritage that reflects the region's enduring identity. The variety of traditions, customs, and broad spectrum of archaeological sites scattered across the province's northern, central, and southern regions are evidence of this diversity and enduring cultural legacy (Sidi Ali, 2022, pp. 107-123).

Regrettably, the vast tangible heritage of the province of Khenchela has not been fully utilised to reflect the actual image of its local population. Most of Algerian society remains largely unaware of the province's rich and deeply rooted history. Even the local inhabitants, many of whom are young, often lack awareness of the identity derived from their heritage, an oversight for which we are all collectively responsible: the academic community, local authorities, the Directorate of Tourism, and the Directorate of Culture alike. Although specific stakeholders

have made some efforts, these initiatives remain insufficient. Preserving local identity clarifies our glorious historical legacy and opens doors to a more promising future.

In recent years, the state, through its local institutions in Khenchela, has attempted to challenge the outdated perception of the province and raise awareness of its heritage through various approaches while also working to safeguard this heritage via several projects, including those spearheaded by the Directorate of Culture, the Directorate of Tourism, and local authorities, such as the following:

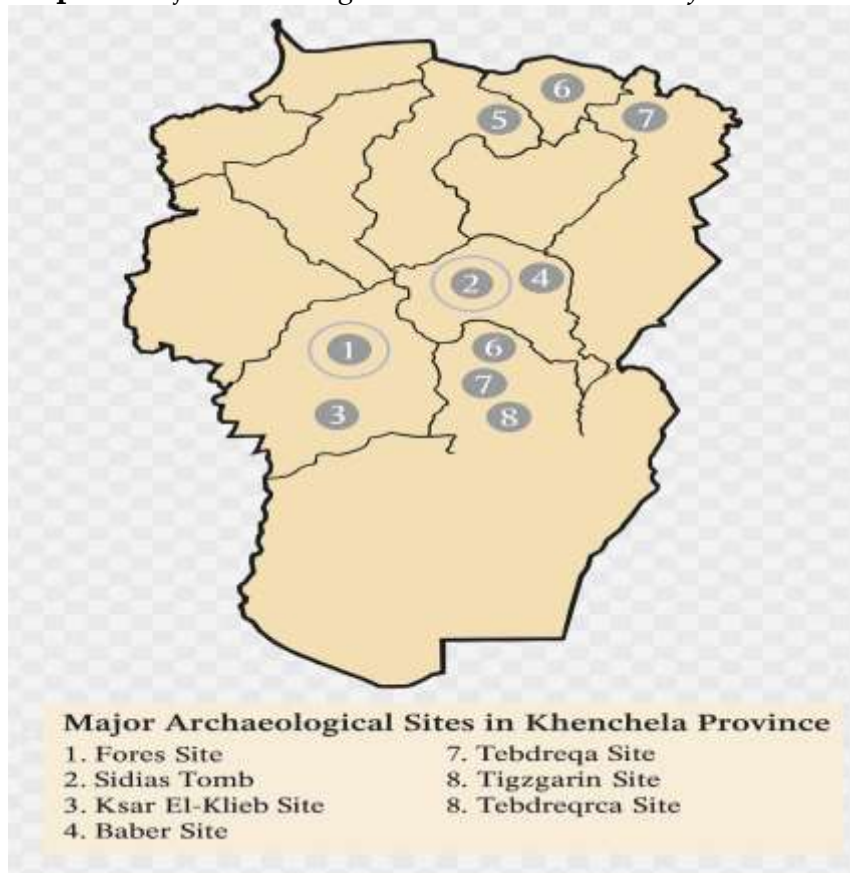
- The classification of numerous archaeological sites across the province, in addition to previously classified sites such as Tabardqa, Tibaalin, and Baghai, as well as other notable locations.
- The isolation from many archaeological sites in the province, such as the Tizgrarin site in the municipality of Chéchar and the Tibaalin site in the municipality of Khiran, among others, was removed.
- Moreover, the Public Museum of Archaeology "Brothers Boulaaziz" has played an essential role in preserving the region's tangible heritage and local identity by collecting artefacts from across the municipalities of Khenchela and exhibiting them, in addition to organising various cultural and educational activities.
- The province's Directorate of Tourism has contributed significantly by **approving the construction of several hotels and travel agencies**, which are expected to attract a substantial number of tourists. These initiatives include developing **programmes to visit archaeological sites** across the province and learn more about the region's identity and cultural heritage.

➤ .

- The Directorate of Tourism's **promotion of traditional industries** also plays a crucial role in **showcasing the region's tangible heritage and strengthening its cultural identity**.
- In addition to its **economic benefits**, this shift has transformed how people engage with heritage. They adopt **new civilisational concepts and foundations** that align with contemporary changes and are responsive to ongoing **developments and transformations** of the modern era.

2.4. Major archaeological sites in the Province of Khenchela

Archaeological sites play a leading role in what is known as heritage tourism, significantly contributing to the economic revenues of many countries. In the province of Khenchela, several prominent archaeological sites have the potential to support local development through archaeological tourism. Among the most notable are the following:

Map 01: *Major archaeological sites in the Province of Khenchela*

Source: National Museum of the Boulaaziz Brothers, *Khenchela – adapted.*

▪ **The Site of Fourès:**

Located in the **northern part of the province**, within the municipality of **Ouled Arrachache**, the archaeological site of Fourès spans an extensive area estimated at approximately **20 hectares**. The site is home to various archaeological features

resembling **large and monumental structures**. It also includes a network of **roads** and **water resource systems**.

The site is particularly notable for its numerous **mosaic-paved baths**, adorned with **geometric decorations** in uniform colours and crafted with high technical skill. Many **pottery fragments** and **stone tools**, particularly items made from **flint**, have been recorded at the site (*see Map 1*).

- **Site of the Mausoleum of Sidiass:**

This mausoleum is located in the village of **Ouled Azeddine**, within the municipality of **El Mahmal**. It is also known as "**Qasr al-Jaziya**", about the legend of the famous princess **al-Jaziya**. The monument is considered a symbol and architectural icon, exhibiting features reminiscent of **Carthaginian architecture**. It has a **hexagonal structure**, with a central **recess and two decorated columns** at the top, reaching an approximate height of **7 metres**, and is adorned with **Roman-style ornamentation**.

Numerous **engraved stones** featuring **ancient Latin inscriptions** and **geometric motifs** surround the monument. The village's layout is **irregular**, and while **Gsell** briefly mentioned the site, his references were rather superficial. The village was believed to have been destroyed during the **late Roman period**, possibly due to **religious conflicts** (*see Map 01*).

- **The Site of Qasr El-Kelb (The Palace of the Dog):**

Located in **Aïn Touila**, this site extends over a **relatively large area** and is marked by numerous **polished stone blocks**. It contains **archaeological remnants** from various civilisations, notably **Numidian, Roman, and Byzantine**. Among the site's features are the **ruins of a church**, the **remains of a Byzantine fortress**, and a **natural spring**. Historically, the site served as a connection between the roads of **Mascula and Tifassen**.

Gsell suggested that Qasr El-Kelb may correspond to the ancient Roman site, "**Vegelese**", on the basis of inscriptions discovered at the location and supported by several historical sources.

Despite strong Roman and Byzantine architectural influences, the site shows a **distinctive local character**, particularly in its use of **small stones**, in contrast to traditional Roman architecture, which typically employs **large stone blocks**. Although Gsell mentioned a few archaeological sites in the **northern part of Khenchela**, his references were brief and primarily **descriptive**, omitting many significant sites across the province (*See Map 01*).

▪ The Site of Babbar:

Located approximately **15 kilometres from the municipality of Babbar**, this archaeological site is situated on a **slope**. It was initially a **Numidian settlement** that later witnessed the **succession of several civilisations**. The **remaining wall structures** still clearly reveal certain parts of the site, which once included **a group of houses**, some **unidentified facilities**, and a **large water basin**.

Despite its rugged terrain, the site's **strategic location** was ideal for human settlement because of two key factors: the **availability of water** and its **natural defensibility**. Inhabitants in the area increased their defences by constructing an **additional wall**, especially as a protection measure against invaders, particularly **Romans**.

The site reflects typical **Numidian architectural features**, most notably the use of **small stones** in construction. Mortar was employed as a **binding agent**, strengthening the structure of the walls. In addition, several **pottery fragments** were un-

covered, mainly **undecorated and uncoloured ceramic pieces**.
(See Image 02 and Map 01)

Image 02 : *The Archaeological Site of Babbars*



Source: *Photograph by the researcher.*

▪ **Zawiya site:**

This site is located in the **southern municipality of Chéchar**, approximately **30 kilometres from the municipal centre** and **80 kilometres from the provincial capital**. It is situated in the village known as **Zawiya**, along the banks of **Oued Bagra**. The site is characterised by its **high degree of natural fortification**, making it one of the most **heavily fortified sites in the southern part of the province**, following Taghit and Tizgrarin.

The site contains **many archaeological artefacts**. Among the most notable discoveries are a **series of Roman columns**, the most prominent of which are currently placed in the **courtyard**

of the village school. In addition, a **Roman-era olive press**, **water wells**, and several **grain mills** have been found at the site. (See Image 03 and Map 01)

Image 03 : *The Archaeological Site of Zawiya*



Source: *Photograph by the researcher.*

Those who closely observe the **course of Oued Bagra**, which encompasses numerous sites such as **Meziane village**, **Taghit**, **Hanshir Amrane**, and **Zawiya**, will realise that the **Numidian inhabitants** of these areas consistently favour **seclusion and fortification** to protect themselves from adversaries regardless

of their identity. Reaching these sites is notably tricky because of their **inaccessible and defensive locations**.

▪ **Site of Tabardqa:**

Located in **Chéchar**, Tabardqa is among the most prominent **archaeological and touristic sites** in the southern part of the province. It is characterised by **remarkable diversity**, encompassing several historically significant layers within a single location:

1. The **first area** contains **Palaeolithic remains**, mainly a collection of **lithic tools** discovered **north of the village**.
2. The **second area** includes a series of **Roman-era ruins**.
3. The **third section** features a **French fortress**, a remnant from the colonial period.
4. The **fourth area** houses a **mosque dating from the late Ottoman period** alongside **residential structures** belonging to the local population. (*See Map 1*)

▪ **Tizgrarin site:**

Tizgrarin is an archaeological site in **Chéchar** that is approximately **20 kilometers from the municipal center** and **approximately 70 kilometers from the provincial capital**. It is characterised by **rugged mountainous terrain**, which makes it accessible only via **rough and narrow paths**.

This site dates back to the **Numidian period**. The dwellings were constructed with **small stones** reinforced with **locally produced mortar**. The site also contains **water storage systems**, specifically **rock-carved basins** used for drinking water.

Architecturally, Tizgrarin closely resembles certain archaeological features in **southern Batna**, particularly its **civil architecture**, including **residential housing and urban layout** (Tahraoui, 2018, pp. 180–181).

(*See Map 1*)

▪ The Site of Tibaalin:

Located in the **municipality of Khiran**, the archaeological site of **Tibaalin** was officially **classified as part of national heritage in 2024**. It is considered one of the **key historical stations** in the southern part of the **Aurès region**. The Romans used it as a strategic centre to strengthen their hold over the region and support the **Limes line (defensive frontier)**.

The site's **strategic location** gave it immense military and geographical importance. It **overlooks mountain and water access routes**, particularly near **Oued El Arab**, the lifeline of this **semiarid region**. The **surrounding hills** provided the **raw materials** and substantial **sandstone blocks** for constructing the settlement. Many of these **monumental stones still stand today**, bearing witness to the site's historical significance.

In addition, the site contains many **polished stones**, fragments of **ceramics of various styles**, and a remarkably well-preserved **mausoleum**. This structure is a **refined funerary monument** consisting of a **base surmounted by a tiered level** that enhances its height, forming a **new platform** upon which the **upper level** rests, crowned with a **pyramidal roof**. (*See Map 1*)

Conclusion

The province of Khenchela is among the most prominent regions in Algeria in general and in eastern Algeria in particular, distinguished by its deep historical roots. It is richly endowed with archeological sites, demonstrating high archaeological

density. Although only a portion of this heritage is currently visible, it offers a clear picture of human development in the region throughout history. Through this study, we have reached several key findings:

1. Algerian antiquities, in general, and those in Khenchela are still in the early stages of discovery. While numerous provinces nationwide have undergone archaeological excavations and research, Khenchela remains largely unexplored. Some descriptions from the colonial era remain the only available references for many sites.
2. The region has witnessed several civilisations, even though its history has not been comprehensively documented or the subject of extensive archaeological excavations. Its heritage spans from the Palaeolithic period to the present day.
3. The province of Khenchela contains many archaeological sites dating from various historical periods. This richness and diversity make it a prime tourist destination.
4. There is a strong and intrinsic link between tourism activity, archaeological sites, and local identity to the extent that it can be said that there can be no tourism without tangible heritage, particularly antiquities.
5. Archaeological tourism plays a significant role in local development, generating substantial revenues both for the state and for local populations through what is known as sustainable tourism.
6. Local authorities and archaeology specialists must prioritise the preservation of this tangible heritage through all available means, including implementing deterrent measures against violators.
7. Tangible heritage (archaeological sites) plays a vital role in preserving a region's local identity and is reinforced

by various actions undertaken by state and archaeological experts.

8. In recent years, the state has adopted a series of measures in the province of Khenchela to preserve and use tangible heritage for local development.

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Artificial Intelligence Threats to National Security: A Strategic Perspective

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Abstract

Artificial intelligence is one of the most influential modern technologies impacting national security offering advanced capabilities in processing massive data quickly and accurately. It enhances areas such as military intelligence, surveillance, forensic analysis, border protection and counterterrorism. Intelligent robots can also help safeguard critical infrastructure and control high-risk zones. One of its key advantages is the ability to predict potential threats and enable proactive measures. However, its use also brings major challenges, including privacy concerns, cyberattacks and algorithmic biases which necessitate strict regulations to mitigate risks and ensure responsible application in strengthening national security.

Keyword: Artificial Intelligence ; Cyber Security; National Security ; Information Manipulation ; Cyberattack.

Menaces de l'intelligence artificielle pour la sécurité nationale : Une perspective stratégique

Résumé

L'intelligence artificielle est l'une des technologies modernes les plus influentes en matière de sécurité nationale, car elle offre des capacités avancées de traitement rapide et précis de données massives. Elle améliore des domaines tels que le renseignement militaire, la surveillance, l'analyse médico-légale, la protection des frontières et la lutte contre le terrorisme. Les robots intelligents peuvent également contribuer à la protection des infrastructures critiques et au contrôle des zones à haut risque. L'un de leurs principaux avantages est leur capacité à prévoir les menaces potentielles et à prendre des mesures proactives. Toutefois, son utilisation pose également des défis majeurs, notamment en ce qui concerne la protection de la vie privée, les cyberattaques et les biais algorithmiques, qui nécessitent des réglementations strictes pour atténuer les risques et garantir une application responsable dans le cadre du renforcement de la sécurité nationale.

Mots clés : Intelligence artificielle ; cybersécurité ; sécurité nationale ; manipulation de l'information ; cyberattaque.

Introduction

Today, the world is witnessing a radical transformation due to the technological revolution, as artificial intelligence has become one of the most prominent technological tools that are reshaping various aspects of life. We have moved from the industrial age to the information age and intelligent algorithmic systems and artificial intelligence has become a key component in decision-making, analysis, monitoring and forecasting, both in the civil and military fields.

In the context of national security, AI is a double-edged sword; on the one hand, it provides tremendous opportunities to enhance the country's capabilities to counter threats through improved intelligence, surveillance, forensic analysis, border protection, and counterterrorism. Artificial intelligence technologies also allow predicting potential patterns and threats with unprecedented speed and accuracy and employing robots and smart systems to enhance the physical protection of risk areas and critical installations.

On the other hand, there are deep challenges and risks associated with the use of this technology, especially in light of the development of "super artificial intelligence", which may exceed the capabilities of humans in control and surveillance and raise existential concerns related to both national and human security. Arab countries in particular face challenges in this area, including weak digital infrastructure, limited access to data and computer resources and reliance on foreign technology that could lead to serious technological dependency.

In cybersecurity, AI has become an effective tool to enhance protection and detect cyberattacks in real time, but its use in complex attacks and information manipulation further complicates the threat environment. There is a need for precise legislation and specialized bodies to keep pace with the rapid uses of this field to protect privacy and prevent misuse of data.

Artificial intelligence is also increasingly interfering with the concepts of health security, as smart tools show great potential in improving health services, predicting epidemics and analyzing patient data, but in turn it poses ethical problems related to data privacy and care decisions.

In the field of education, AI offers qualitative potential to improve the learning experience, personalize content and improve academic performance, but these benefits are met with challenges related to digital justice, qualifying cadres, and ensuring the ethical and equitable use of smart technologies.

The growing role of AI in security, politics, education and health requires to act proactively by investing in digital infrastructure, building national competencies, developing effective regulatory frameworks and strengthening international cooperation to ensure the safe and sustainable use of this vital technology in line with human values and preserving national sovereignty.

1. The importance of strategy in adopting artificial intelligence for organizations

A 2017 survey of more than 3,000 CEOs, managers and analysts around the world shows that 60% of them say an AI strategy is absolutely necessary. This strategy is the cornerstone of enabling the actual transformation of the organization when using AI technologies resulting in valuable returns and improved performance and productivity. Its importance lies in helping the organization understand its data and use it to automate core processes or develop and launch new products.¹

1.1 Administrative advantages of an AI strategy

- Identify strengths, weaknesses, opportunities and threats: The strategy helps assess the current capabilities and skills of the organization, facilitating the transition towards adopting AI.
- Setting goals and initiatives: Contribute to identifying priority AI goals and initiatives that effectively support the achievement of the organization's vision.
- Developing organizational culture and work procedures: It works to create the culture of the organization and unify the efforts of different teams to be ready to implement artificial intelligence initiatives.
- Enabling successful investment: Ensures that investments in AI are maximized in line with the organization's important goals and metrics.

¹ Ransbotham, S., Kiron, D., Gerbert, P. & Reeves, M. Reshaping Business With Artificial Intelligence. MIT Sloan Management. Review <https://sloanreview.mit.edu/projects/reshaping-business-with-artificial-intelligence/> (2017).

1.2 Technical advantages of an AI strategy

- Increase automation opportunities: The strategy enhances the opportunities for automation and reliance on artificial intelligence in product development and linking them directly to business goals.
- Support data scientists and machine learning engineers: help them develop effective solutions to address real-world challenges faced by the organization.
- Accelerate solution deployment: Accelerate the deployment of AI solutions within the work environment.
- Raising the value of data and artificial intelligence: increases the overall value of data and artificial intelligence within the organization, enhancing its competitiveness and innovation.

2. Some uses of artificial intelligence in the field of national security of countries

AI can significantly contribute to enhancing the security of countries by offering multiple benefits in the field of national security, as its technologies are used to strengthen military intelligence capabilities and internal and external security. Artificial intelligence is a major advance in the world of technology, but it is not without its negatives and risks that may affect national security and the international community. Therefore, it is necessary to conduct in-depth studies to assess these potential risks resulting from the widespread use of AI in this field while developing effective strategies to deal with the challenges and ensure that the maximum benefit from this technology is made in a safe and responsible manner¹.

¹ Babu Jamal Eddine and Dabar Mohamed El Amine, The Implications of Artificial Intelligence on National Security, Journal of Private Law, No. 01, Vol. 02, pp. 100–122, University of Tsimsilt and University of Sidi Bel Abbes, Algeria.

2.1 Role of AI in enhancing national security

Artificial intelligence plays a pivotal role in supporting and enhancing national security through a set of important positives, most notably:

1. Early prediction and sensing: AI can analyze big data and identify patterns that indicate potential security threats, helping in issuing early warnings to the relevant authorities.

2. Big data analysis: Artificial intelligence is characterized by its ability to process huge amounts of data efficiently and accurately, which contributes to the detection of hidden relationships or threats that are difficult for humans to notice.

3. Image and face recognition: Artificial intelligence is used to develop advanced image and face recognition systems, which facilitate the tracking of suspects and wanted persons and improve mechanisms to combat crime and terrorism.

4. Cybersecurity: Artificial intelligence contributes to monitoring systems and detecting cyber-attacks early and helps develop smart solutions to combat them, which enhances the protection of sensitive networks and data.

5. Enhance border security: AI techniques, such as face recognition and behavioral analysis can be used to improve border and entry control, increasing the efficiency of threat recognition and preventing the infiltration of unwanted persons.

6. Decision support: AI can analyze complex security situations and provide accurate reports and recommendations that help decision-makers make strategic and tactical decisions faster and more effectively.

AI contributes to raising the efficiency of national security comprehensively by improving prediction and early detection capabilities, enhancing cybersecurity, supporting monitoring and analysis and providing effective tools for decision-makers

in addressing modern security challenges.

2.2 Risks of AI to the national security of countries

Artificial intelligence despite its multiple benefits, is an increasing source of threats to the national security of countries, especially with the escalation of its adoption in the political, military and security fields, and the most prominent of these risks are highlighted in the following points¹:

Transformation in the structure of the labor market: Artificial intelligence contributes to the replacement of automated systems in a large number of jobs, especially those that are duplicate or dangerous which leads to high unemployment rates. Although new jobs are emerging in programming, data analysis and intelligent systems management, this shift may lead to social unrest due to the difficulty of adapting to the Newly required skills.

1. Algorithmic bias: AI systems rely on the data they are trained on, which may be tainted by deep-rooted cultural or social biases. As a result, these systems may produce unfair or discriminatory decisions, threatening the principle of justice, exacerbating societal disparities and attempts to correct this bias may negatively affect the efficiency of trained models.
2. Erosion of moral values: The widespread use of autonomous combat systems such as drones has bypassed international laws and ethical standards by targeting people without trial or legal verification. These violations are of grave concern because of the threat they pose to human rights and the safety of civilians.
3. The possibility of developing self-awareness of smart

¹ Melal, Hassan, Support, Said. "Artificial intelligence and the threat to the national security of states"

systems:

The development of some advanced systems, such as Google's Lambda model, raises concerns that artificial intelligence may have a form of self-awareness and in the absence of clear legal frameworks, this may lead to a loss of control over these systems, especially in the military fields which threatens conflicts led by non-human decisions.

4. Failure to distinguish between targets: Artificial intelligence does not have the innate ability to distinguish between military and civilian targets which makes it vulnerable to serious mistakes on the battlefield, and this deficiency is a flagrant violation of international humanitarian law, especially in the absence of a clear mechanism for legal accountability for these violations.
5. Lack of emotional and creative sense: Artificial intelligence lacks the ability to absorb the emotional aspects that are necessary in the areas of politics, security and decision-making, especially in interacting with public opinion. It also faces difficulties in producing creative solutions to complex problems that require human flexibility and innovation.
6. Enhancing cyber-attacks: Although artificial intelligence is used to enhance electronic defenses, it is used in return to carry out advanced and smart cyberattacks, such as automated fraud, bypassing protection systems, and phishing antivirus programs. Training these systems on inaccurate data can lead to catastrophic results and significant material and technical losses.

3. Information Manipulation and Media Threat

AI is used to create false content such as deepfakes and misleading articles, threatening public trust and affecting democratic processes such as elections. This technology is exploited to disinformation, spread rumors and create internal crises through social media¹.

3.1. Information manipulation and media threat using artificial intelligence:

Deep Videos (Deepfakes):

- How it works: Deep learning techniques are used to create or edit videos and audio in a way that looks very realistic. It can replace people's faces with others or make them say or do things they haven't actually said or done.
- Its impact on public trust: It shakes trust in the media and news, as it becomes difficult to distinguish between truth and falsification. This can lead to a "crisis of trust" where the public doubts everything they see and hear.

Influence on democratic processes (e.g. elections):

- Political disinformation: They can be used to spread misinformation about candidates or create videos of them making controversial or racist statements that affect public opinion and election results.
- Voter manipulation: It may distort facts and prompt voters to make decisions based on false information.
- Undermining legitimacy: Even if fraud is exposed, its mere existence can raise doubts about the integrity of the electoral process.

Spreading rumors and creating internal crises:

¹ Momeni, M. (2024). Artificial Intelligence and Political Deepfakes: Shaping Citizen Perceptions Through Misinformation. *South Asian Journal of Governance and Regulation*, 20(1). <https://doi.org/10.1177/09732586241277>

- Incitement to violence: Deepfakes can be used to create false narratives that foment social divisions and incite violence.
- Impact on financial markets: They may be used to spread false news about entire companies or economies leading to significant market volatility.
- Blackmail and defamation: used to blackmail or discredit individuals.

Misleading articles and creating false content:

- Large language models LLMs: enable AI to produce news articles, social media posts and even email campaigns that look very real and compelling.
- Rapid spread: These tools can produce massive amounts of misleading content at breakneck speed, making it difficult for human validators to keep up.
- Personalization: Misleading content can be adapted to specific audiences, making it more effective at misleading.

As for advanced armies in adopting artificial intelligence in the development of smart weapons, drones, and decision-making systems in battle. This creates a new type of war known as "algorithmic warfare," in which sensitive military decisions are made based on algorithms that sometimes lack human or moral sense (Khalifa, Ehab, 2022).

3.2. Artificial Intelligence in Warfare and "Algorithmic Warfare":

Smart weapons and drones:

- Increased autonomy: Some of these systems have the ability to identify targets and make attack decisions without direct human intervention (Autonomous Weapons Systems - AWS). This raises significant ethical and legal concerns about "meaningful human control.").
- Increased lethality: Autonomous systems can operate faster and more accurately than human capabilities, increasing battlefield lethality.
- Reduce risk to soldiers: It is seen as a way to minimize casualties among the armies that use it but increases the risk of civilian casualties.¹

Decision-making systems in battles:

- Rapid data analysis: AI can quickly process vast amounts of intelligence data, identify patterns and make recommendations to military leaders.
- Improve efficiency: This can lead to faster, more informed decisions on the battlefield.²
- "Algorithmic Warfare": Competition between algorithms: In this type of war, AI systems compete to collect information, analyze it, and make decisions faster and more effectively than enemy systems:
 - Breakneck speed: Battles can occur in "fractions of a second," with autonomous systems making decisions faster than humans can respond.

¹ Air Power Development Centre. (2018, March). Algorithmic Warfare Applying Artificial Intelligence to Warfighting (ISBN: 978192562267).

² Hoyos, C. V. (2024, October). *The Use of Artificial Intelligence in Political Decision-Making*. <https://doi.org/10.20944/preprints202410.0360.v1>

- Absence of human or moral sense: This is the essence of the moral challenge. Algorithms are designed to achieve a specific goal (such as destroying a target or improving efficiency) but lack a human understanding of context, empathy, and the ability to make complex moral judgments in situations of war uncertainty.
- Accountability problem: If an autonomous machine causes collateral damage or makes a "mistake", who is responsible? The programmer? The manufacturer? The leader who deployed it? This raises serious legal and ethical challenges.
- Unintentional escalation: Algorithmic decisions may lead to an unintended escalation of conflicts due to a lack of human understanding of intentions or context.

3.3. Challenges and potential solutions:

- Regulation and legislation: The urgent need to develop international laws and standards to regulate the use of artificial intelligence in the fields of information and warfare.
- Development of detection techniques: Development of tools and techniques to detect false content and verify facts.
- Awareness and Education: Increase public awareness of the dangers of artificial intelligence in disinformation and encourage critical thinking in individuals.
- Ethics in Design: Emphasize the design of AI systems with ethical principles in mind, reduce biases and ensure transparency.

- International cooperation: The need for cooperation between governments, international organizations, technology companies, and civil society to address these challenges.

The rapid development of AI holds enormous potential but also poses serious challenges that require a comprehensive and multifaceted response to ensure its responsible and ethical use¹.

4. The Arab World's Technological Landscape: Implications for AI Threats to Critical Infrastructure

AI can be used to attack critical infrastructures such as power plants, water and transportation networks. The increasing reliance on automated systems makes these facilities easy targets if not adequately fortified.

The past few years have witnessed a steady rise in the importance of AI technologies in the Arab world with increasing recognition of their ability to drive innovation, economic growth and societal development. Saudi Arabia and the UAE have emerged as leaders in AI, unveiling ambitious strategies and initiatives that include significant investments in R&D and infrastructure. According to the 2023 Stanford University AI Index report, Saudi Arabia ranks second globally after China in terms of positivity towards AI tools and services.

Despite the increasing dominance of AI in daily life in our region and the expansion of its use, one of the main challenges facing the region is the lack of technological infrastructure.

Most countries in the region suffer from limited internet connectivity, obsolete devices and data privacy restrictions,

¹ Ben Najma, Muhammad. "Artificial Intelligence and National Security Challenges: A Technical Approach". *credibility*, 5(2), 49-64, 31 December 2023.

which pose obstacles to the development of artificial intelligence in the Arab world.

These constraints hinder the collection and use of data necessary to train and improve generative AI models which significantly limits the potential for progress in this area. This widens the gap between the Arab world and the rest of the international community, creating a dangerous technological disparity that could increase Arab states' dependence on other world powers. This, in turn, could undermine Arab political, economic, and security autonomy and likely threaten core national security interests.

Natural Language Processing (NLP) models are the primary technology that enables computers to generate content¹. However, the development of natural language processing models for Arabic is still lagging behind, putting the Arab world at a distinctly disadvantage. This lag is due to the scarcity of both Arabic language resources and the technological infrastructure needed to process large amounts of data, which explains the limited Arabic language application systems available.

Although **The NOOR** model is one of the few models of Arabic natural language processing that has played a pivotal role in bridging the gap between Arabic language processing and generative artificial intelligence, but the Arab world still has a long way to go to compete with other global players.

In addition, the great need for computational resources to develop generative AI models is a major infrastructure challenge in the Arab world.

¹ Wang, J. K., Wang, S. K., Lee, E. B., & Chang, R. T. (2023, June). Natural Language Processing (NLP) in AI. (pp. 243-249). https://doi.org/10.1007/978-3-031-24052-2_17

AI models, especially those used for generative tasks such as compositing images or generating content, require high processing power and memory. Running these models beyond the operational capacity of computers can cause overheating and malfunctions, leading to systems failures and delays in research and development. Overcoming these obstacles by investing in infrastructure will contribute to the growth of generative AI in the region, foster innovation and open up new opportunities for its applications in various sectors.

Moreover, the limited access and participation of the Arab world in the inclusive development of AI technologies raises concerns about inclusiveness. Bridging the digital divide and ensuring that all segments of society and the global community have access to and participate in shaping these technologies is critical to national security. Unequal access and participation can exacerbate societal divisions and may lead to conflicts between states. Unfortunately, even within the Arab world, there is a disparity in access, sharing, and handling of AI technologies, with an ever-increasing technological gap between AI developed and less developed countries over time, which could raise tensions and undermine Arab unity¹.

5. Threats of artificial intelligence in the intelligence field

Generative AI models require vast amounts of data for effective training as this data is the core currency of the future of technology. In the digital age and with the widespread Internet of Things (IoT), data is collected from billions of devices in a variety of formats including text, images, video and voice.

¹ Hanish, Ahmad, and Daq'ah, Ahmed. "The Use of Modern Technologies for Artificial Intelligence in the Arab Countries (A Case Study of Algeria)". *Journal of Economic and Financial Studies*, 17(December 2024), 231-249.

According to a report by the International Data Corporation, the volume of data is expected to grow Global to 175 zettabytes (ZB) by 2025 compared to 33 zettabytes in 2018. Thus, any kind of data breach would pose a significant national security risk as the main concern lies in protecting sensitive information. Safeguarding the ever-increasing amount of data, ensuring privacy and implementing robust security measures to mitigate its misuse is in the best interests of national security¹.

The use of advanced technological capabilities of AI by adversaries poses a serious challenge to national security especially if AI systems are employed to generate sophisticated cyberattacks, forged documents, organize disinformation campaigns, or any other form of malicious activity.

Any kind of fake content including "**deepfakes**" and disinformation, can act as a threat multiplier because misinformation can provoke division, manipulate public opinion and destabilize institutions and states.

There is also no guarantee that this technology will always be appropriately used by governments or even large corporations that may be tempted to harness the capabilities of AI to achieve their narrow interests through unethical surveillance, manipulation or control schemes².

Also, with the increasing penetration of artificial intelligence (**Superintelligence AI**), its ability to disrupt traditional industries and labor markets is a major concern.

¹ Liu, X. (2022, October). The Study on National Security in Big Data Era. *Frontiers in Business Economics and Management*, 5(3), 191-200. <https://doi.org/10.54097/fbem.v5i3.2006>

² Canadian Security Intelligence Service. (n.d.). *The Evolution of Disinformation: A Deepfake Future - Implications of deepfake technologies on national security*. Canada.ca. Retrieved May 19, 2025, from <https://www.canada.ca/en/security-intelligence-service/corporate/publications/the-evolution-of-disinformation-a-deepfake-future/implications-of-deepfake-technologies-on-national-security.html>

Task automation and the ability to generate content at scale have the potential to displace the workforce and exacerbate economic disparities and resentment will spread among the segments of society most affected by these developments. As AI systems become more capable and efficient, they can take over tasks which was previously performed by humans which may make some functions obsolete. This laying off the workforce can create economic challenges with dire social and political consequences¹.

Intelligence agencies have also come to rely on artificial intelligence in collecting and analyzing data, but on the other hand, the same techniques can be used to penetrate systems, spy and analyze the movements of countries in an advanced way that is difficult to confront in traditional ways.²

With the development of technology, cybersecurity has become one of the most important challenges faced by institutions and individuals alike and AI attacks in cybersecurity are among the biggest threats we face in the current era. Attackers are using AI systems to carry out sophisticated and targeted, making them more difficult to detect and control.

¹ Hendrycks, D., Schmidt, E., & Wang, A. (2025, March 7). *Superintelligence Strategy: Expert Version*. <https://doi.org/10.48550/arXiv.2503.05628>

² Arab University for Security Sciences (Naif). (2024). Security Policy Analysis Paper: Super Artificial Intelligence. Security policy papers. Available on: <https://nauss.edu.sa/>

6. Future prospects for AI in cybersecurity

With the rapid advancement of technology, the cyber threat is constantly increasing. Therefore, the use of artificial intelligence in cybersecurity is reflected in many benefits and potential.¹

The use of artificial intelligence in enhancing cybersecurity can have a significant impact in areas such as:

- Detect and prevent threats
- Automatic diagnosis of vulnerabilities
- Immediate response to attacks
- Analyze user behavior

The development of future technologies for artificial intelligence in the field of cybersecurity: As technological development continues, the potential of artificial intelligence in cybersecurity also increases. Here are some interesting future technologies:

- Enhanced Machine Learning
- Deep neural networks
- Predictive analysis and automatic classification
- Self-reflection and decision-making

¹ Tao, F., Akhtar, M. S., & Jiayuan, Z. (2021, July). The future of Artificial Intelligence in Cybersecurity: A Comprehensive Survey. *EAI Endorsed Transactions on Creative Technologies*, [Volume number, if available], [Issue number, if available], Article 170285. <https://doi.org/10.4108/eai.7-7-2021.170285>

Conclusion

The expansion of the use of artificial intelligence is impacting societal and international interactions and raising questions about the future of human jobs. For Kai Fu Lee, the most important question is not whether artificial intelligence will replace humans, but how humans can adapt to work alongside these technologies in a new economy.

Artificial intelligence is a double-edged sword, as it carries great opportunities and serious challenges at the same time, especially at the level of job structure and making fateful decisions, which requires legalizing its use and establishing governing controls. Key recommendations to address the national security implications of AI, including:

1. Increase R&D In artificial intelligence techniques to counter security threats.
2. Adoption of clear legislation It regulates the use of this technology while protecting national security.
3. Enhance cybersecurity by developing smart systems and securing them against attacks.
4. Strengthening international cooperation to exchange security information and experiences.
5. Training of security personnel to keep up with the challenges of artificial intelligence.
6. Establish ethical frameworks that ensure responsible and safe use of technology.

The future holds more complexity as AI technologies will evolve faster than humans can understand and regulate them. Thus, national security will not be confined to geographical boundaries but will require full digital readiness to confront threats that are not visible to the naked eye.

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Urban Growth: Concept, Dimensions, and Theoretical Connotations

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Abstract:

The study aims to analyze the phenomenon of urban growth, a significant phenomenon that impacts the form and urban functions of cities, encompassing both developed and developing world cities, and which requires a new perspective and study by researchers interested in urban studies, as urban growth is linked to numerous phenomena and problems, including the prevalence of formal discipline, superficial social relations based on interests, and significant social mobility (spatial and professional).

To understand the aspects of urban growth, a clear understanding of the meaning of urban growth is necessary, it also requires a forward-looking vision of urban growth in contemporary studies, based on a set of theories and principles that explain the factors influencing the locations, sizes, and numbers of cities, as well as the distribution of these urban centers within their countries and regions; in addition to theoretical approaches to analyzing urban growth, which include the historical de-

velopment of urban growth and the most important theories that explain this development.

Finally, we discuss the main aspects of urban growth: demographic, regulatory, and environmental factors, as well as the most important factors upon which urban growth depends, the importance of which varies according to the stages and levels of urbanization.

Keywords: urban growth, urbanization, city.

La croissance urbaine : Concept, dimensions et connotations théoriques

Résumé :

L'étude vise à analyser le phénomène de la croissance urbaine, un phénomène important qui a un impact sur la forme et les fonctions urbaines des villes, englobant à la fois les villes du monde développé et en développement, et qui nécessite une nouvelle perspective et une nouvelle étude de la part des chercheurs intéressés par les études urbaines, car la croissance urbaine est liée à de nombreux phénomènes et problèmes, y compris la prévalence de la discipline formelle, les relations sociales superficielles basées sur les intérêts, et une mobilité sociale importante (spatiale et professionnelle).

Pour comprendre les aspects de la croissance urbaine, une compréhension claire de la signification de la croissance urbaine est nécessaire, elle nécessite également une vision prospective de la croissance urbaine dans les études contemporaines, basée sur un ensemble de théories et de principes qui expliquent les facteurs influençant l'emplacement, la taille et le nombre des villes, ainsi que la distribution de ces centres urbains au sein de leurs pays et régions ; en plus des approches théoriques pour analyser la croissance urbaine, qui comprennent le développement historique de la croissance urbaine et les théories les plus importantes qui expliquent ce développement.

Enfin, nous discutons des principaux aspects de la croissance urbaine : les facteurs démographiques, réglementaires et environnementaux, ainsi que les facteurs les plus importants dont dépend la croissance urbaine et dont l'importance varie en fonction des étapes et des niveaux d'urbanisation.

Mots-clés : croissance urbaine, urbanisation, ville.

Introduction

The world has witnessed a dramatic population increase, which played a significant role in the emergence of urban areas. By 1990, the world's population had grown five times what it was in 1850, accompanied by the rapid development of cities and their expansion, with their numbers increasing as a result of the movement of people to the suburbs and the opposite trend of internal migration from rural to urban areas, where economic development also contributed to the development of cities and the improvement of the standard of living of the population.

Urban growth is a global phenomenon that has evolved along with the development of cities. Its beginnings were accompanied by an actual movement in all human societies, in terms of the conditions for the emergence of local communities and their relationship to the rapid increase in population growth, through the phenomenon of migration and the increase in the number of industrial cities in the world, their growth and their population numbers, due to the connection between urban growth and the process of industrialization, as urban growth was the result of industry, which was concentrated in cities and attracted many rural people seeking to improve their standard of living in all areas, which led to the growth and development of cities, the complexity of modern urban life, and the emergence of numerous social problems associated with urban growth, affecting the form, morphology, and urban functions of cities.

Study Problem:

Urban growth is closely linked to everything that happens in our cities, and from this perspective, the problematic aspects of

our study become clear in the following central question: What are the most important concepts and aspects of urban growth? How do various theories and theoretical approaches explain the factors of urban growth in cities?

Definition of Urban Growth:

Urban growth, or "urbanization," as some researchers call it, is considered one of the biggest problems of our time, along with bureaucracy and backwardness, as developing countries have witnessed a surprising degree of urbanization in recent years, manifested by demographic growth—a natural increase in addition to waves of people migrating from rural areas due to poverty and lack of employment (Abdel Latif Ben Ashnahou, p. 152).

Socially and linguistically, this term denotes a social transition to urbanization; Scientifically, it denotes the abandonment of rural characteristics for urbanization, thus abandoning some characteristics and acquiring others (Abdel Baqi Zidan, p. 14).

Urban Growth has more than one definition; it is defined as: "The migration of people from rural areas to urban areas for permanent residence, therefore it refers to people engaging in activities other than agriculture" (Abdel Moneim Anwar, 1970, pp. 57, 90).

Demographer Warren Thompson defines urbanization in the Encyclopedia of Social Sciences as "the movement of people from communities based primarily or solely on agricultural activity to larger communities for employment in trade, industry, services, and other related activities" (Farouk Zaki Younis, 1970, p. 23).

Others have also defined it as "the process by which urban populations increase through the change of rural to urban life, or the migration of villagers to existing cities, including changes in the character, customs, and ways of life of rural people so

that they adapt to urban life" (Abdel Moneim Shawqi, 1966, p. 23).

This definition makes clear that urban growth cannot occur solely due to an increase in urban populations for any reason, as stated in the definition. Rather, it can occur through rural development and a change in lifestyle for the better. Some authors have expressed this as cultural diffusion—cultural contact; according to this definition, urban growth is "movement and change," and in this regard, it is undergoing a phase of urbanization. A document from the United Nations Economic Commission for Asia and the Far East indicates that the phenomenon of urbanization can be defined within its simple demographic context as: "The process by which people tend to concentrate in communities exceeding a certain size" (Abdel Latif Ben Ashnahou, *op. cit.*, p. 154)

Dr. Sayed Abd Al-Aati believes that there is a difference in the rates of balance between population and resources, unlike western urban growth, as there is a noticeable balance between population increase and available resources, and he revealed a repulsive factor for the population from rural areas versus a factor of attraction for them through the resources and job opportunities available in industrial centers, in which the population surplus found a wider opportunity to migrate to other areas that have not yet been exploited. However, urban growth in most developing countries was accompanied by only a repulsive factor, which pushed rural residents to reside in cities, which caused the density rates of developing cities to rise beyond the available resources, as the situation more difficult is that such areas have almost no new possibilities for expansion to accommodate their population growth, which is increasing day after day at rapid and more dangerous rates (Sayyid Abdel Ati Al-Sayyid, 1999, p. 223).

Despite the disagreement among scholars about the precise definition of urban growth, they agree that they use the term urban growth to express natural increase and migration, characteristics that have been confirmed by everyone who has studied urban growth, where a brief definition of urban growth can be given as follows: "Urban growth refers to the increase in the number and proportion of city residents and the expansion of their size as a result of migration from rural to urban areas and natural increase".

1. Conceptions of Urbanization and Urban Growth:

It is essential to have a clear conception of what urbanization and urban growth mean. In general, the connotations and implications associated with the concept of urbanization and urban growth can be summarized as follows (Al-Sayed Abd Al-Aati Al-Sayed, 2003, pp. 104, 112):

1.1 The Demographic Concept:

This conception is considered the most important measure of the urbanization and urban growth process, according to this conception, what is considered urban refers to population centers of a certain size, as urbanization is defined according to this conception within the limits of its connection to population concentration.

Urbanization is also defined within the limits of the trend toward increasing population concentration in cities and urban areas; for example, Hope Tisdale's analysis of urbanization as a process of population concentration is based on two basic elements: the multiplicity of concentration points, on the one hand, and the increase in the size of individual centers, on the other, therefore, the increase in the population residing in urban areas becomes an accurate statistical indicator for measuring the processes of urbanization and urban growth.

While this concept highlights the distinctive characteristics of the process and departs from the conception of the sociological trend, the concept has been and continues to be widely accepted by many researchers, especially demographers.

1.2 The Economic Concept:

Urbanization and urban growth represent an advanced stage of human economic progress. Consequently, urbanization and urban growth are associated with a movement of transition and transformation into more complex economic organizations, meaning the transition from a subsistence economy to a market economy, where this concept has been translated into various formulations that emphasize this trend, which has dominated most Western urban studies, particularly American ones, which focused on studying metropolitan economies and emphasized the link between the processes of industrialization and urbanization.

In this regard, N.S.B. Grass, in his 1932 study, attempted to review the economic history of Western civilization, where he explained the relationship between economic development and patterns of human settlement and settlement throughout history in his evolutionary introduction.

In his historical research of Western civilization within a continuous classification framework, Grass distinguished five basic developmental stages: the stage of the gathering and gathering economy, the stage of the pastoral economy, followed by the stage of the settled village economy, and finally the stage of the city economy, the micro and finally the metropolitan stage, the development of agriculture as a way of life was the most important factor that led humanity to enter a more advanced stage on the road to urbanization.

With the continuation of development, in the view of "Gas", small cities grow as a result of the increase in agricultural production, the increase in the number of craftsmen, the development of means of transportation, and the flourishing of commercial activity, as the emergence of the metropolis after that was a necessary result of the connection between technological and organizational changes accompanying the spread of industrialization and the dominance of the metropolitan economy, where Eric E. Lampard took the same approach in his study of urban industrial development, following the same stages identified by Grass.

1.3 The Ecological concept:

Proponents of the ecological concept—both in its traditional and modern iterations—emphasize population and space (or the variables of size and density) as primary metrics for measuring urbanization, and according to this framework, degrees of urbanization are assessed based on:

- The extent of human mastery over the natural environment and its exploitation for welfare.
- The evolving physical character of urban society, including its scale, functional base, population distribution patterns, activity clusters, and growth trajectories.

1.4 The Organizational concept:

This concept posits that urban growth and urbanization extend beyond mere population increase or density, nor are they confined to economic systems bolstered by advanced industrial technology, rather, urbanization signifies a shift toward more complex social organizations, entailing:

- Enhanced communication networks.
- Socio-political mechanisms that integrate specialized and disparate domains.

- Historically, this systemic complexity has manifested in:
- The rise of strong central governments.
- The expansion of local, regional, and global markets.
- The proliferation of formal and informal institutions.

In essence, urbanization represents a transition from simple to structurally intricate societies.

1.5 The Behavioral Perspective:

The behavioral lens focuses on individual lived experiences over time, particularly behavioral and interactional patterns; here, "urbanism" is viewed as a system of values, norms, and modes of social interaction shaped by specific temporal and demographic contexts.

This concept is rooted in the evolutionary thought of the German sociological tradition (e.g., Tönnies, Spengler, Simmel, and Weber), which applied the ideal type construct to urban phenomena; Weber, for instance, linked urbanization to the rise of rationalized social action.

The concept migrated to American sociology via Robert Park, who studied in Germany and later treated Chicago as a "social laboratory" for urban analysis; In Britain, scholars like Ronald Frankenberg contributed seminal works on urban indicators, amassing a robust empirical legacy.

1.6. Urban Growth in Contemporary Studies (Abd Al-Ilah Abu Ayyash, 1980, pp. 128-133):

The study of urbanization and urban growth in the Arab world and other parts of the world has not relied solely on describing the phenomena associated with and resulting from them, moreover, the growth in the number and size of cities, in the view of many researchers and specialists, is not simply a random change or fluctuation, rather, these changes govern the

characteristics of cities and urban agglomerations. To give the city a scientific character, and to prevent the process of examining and studying cities, their sizes, and their numbers from remaining merely descriptive studies based on direct observation, several researchers have developed a set of rules, models, and theories that explain the factors influencing the location of cities, their size and numbers, and how these urban centers are distributed within their respective regions and countries.

In the 1930s, Mark Jefferson used the concept of the "proto-city" as a phenomenon that characterized the sizes of major cities in the developing world, however, this does not mean that it does not exist in developed countries, where Jefferson noted that in every country in the world, there is a proto-city, which is usually the largest city in the country and often the capital, it is the largest city in size, has the most activities, is the most important in location, and has the greatest influence on the life of the country and its inhabitants. This city is characterized by its control over most of the country's investments and agreements and absorbs most of the labor and productive forces, it is also the city that dominates cultural and economic life, as such, it is characterized by a high rate of consumption compared to other cities, and it has harmful effects on other cities because it monopolizes the most important activities and events in the country.

The proto-city is a phenomenon that characterizes the life of new cities, and it has become evident in city-states, which were composed of a single city, as these cities appear in the Arab world in the new oil-producing countries.

Some researchers believe that it is difficult to predict the circumstances under which the importance of a primary city might decline, furthermore, the size of a primary city is a reflection of the size and population of the country, on the other hand, a primary city doesn't need to be solely the primary city

of a country, but it can also be the primary city of a subordinate region within the country.

Brian Berry has attempted to study this phenomenon in 38 countries around the world, and what appears from the conclusions of "Christaller's Theory" is that there are rules and laws governing the distribution, size, and number of cities, as the Christaller system is an ideal theoretical construct that is difficult to find in reality except in very limited areas whose conditions are consistent with Christaller's assumptions.

- In addition to these rules and theories, various models have emerged to study the process of urbanization and the phenomenon of urban growth, as these models can be classified into the following groups:
- Demographic models, which focus on the impact of population growth and demographic changes on the movement and migration of people from rural to urban areas.
- Economic models, which are linked to traditional location theories, such as Weyer's theory of city locations in industrial areas (Abd Al-Ilah Abu Ayyash, 1980, p. 130).
- Social change models, which view cities as centers for social transformation, as these models rely on difficult assumptions that are difficult to establish in reality, however, through a set of axioms, he was able to explain how cities and centers are distributed across the Earth's surface, according to his view, cities vary in hexagonal shapes, and the emergence of the city as a center for providing services is due to the surrounding environment, where Christaller arranged the centers into seven levels, beginning with the capital as the largest city and ending with new social concepts that conflict with traditional concepts.

- Systems models, which emphasize that the study of urbanization and urban growth is linked to a network of relationships that constitute the urban system, therefore, the phenomenon is studied as a unit interconnected with each other, on the one hand, and with the factors and variables that influence and are influenced by it, on the other.
- City structure models, which view the city as a diverse set of land uses that form its distinctive patterns, where the Burgess, Homer, White Harris, and Ulman models are the most famous, despite the traditional nature of their underlying concepts (Op. cit., pp. 128-133).

2. Theoretical Approaches to Analyzing Urban Growth

2.1. The Historical Evolution of Urban Growth (Sayyid Abd Al-Aati al-Sayyid, 1974, pp. 113-115):

The historical evolution of urban growth is represented by the emergence and development of cities across successive historical stages, as these stages can be summarized into four basic historical stages for analyzing urban growth:

2.1.1. The First Stage: The Folk Stage

This is considered the pre-urbanization stage, extending from the appearance of humans on Earth until approximately 55,000 BC, the date in which humanity experienced the first forms of urban settlement, as, during this stage, the world's population gathered into communities—folks—which were small, self-sufficient groups that relied on hunting, fishing, gathering, and gathering, where they did not experience a permanent sedentary life.

Folk societies recognized some aspects of order based on customs and traditions, in which groups (clans or tribes) represented the dominant social unit, as social relations were then

organized based on kinship alone, while leadership and social control were based on customs and traditions, as folk societies did not recognize long-term social goals.

2.1.2 The Second Stage: Early Urbanization:

This stage represents the first "urban revolution" in human history, during which human life changed from food gathering and gathering to food production, this stage marked a life of stability and permanent settlement in a specific location, which began around 8000 BC, and began particularly in the Middle East.

In general, this initial stage of urban growth witnessed several social, cultural, and economic changes, and according to some researchers, such as Gordon Childe, these changes represent basic criteria or evidence of the early beginnings of urban growth, including:

- The emergence of large, densely populated settlements.
- The emergence of a class of artisans, craftsmen, and other individuals who were entirely dedicated to non-agricultural activities—the division of labor-, where early urban settlements were a natural habitat for population groups that did not produce their food and were devoted to crafts, transportation, and trade.
- Taxes were imposed on farmers in the form of grain or agricultural products.
- The construction of large, public buildings and structures symbolizing the concentration of political and economic power, through the concentration of surplus agricultural production.
- The flourishing of commercial activity and its expansion beyond the local boundaries of the city.

- The emergence of urban communities due to the development of a social stratification system unprecedented in folk societies.
- The emphasis on "place of residence" or "location" rather than kinship as the basis for membership or citizenship, where early cities revealed a kind of adherence closer to organic solidarity, based on integration and functional interdependence among individuals.

It was also characterized by colonial settlement migration processes, and with the formation of the Greek Empire, urban growth entered a new phase characterized by the development of means of transportation, and in some industries, which in turn was a driver for the growth of many urban settlements at a rate of size and population density that had not been known before, as several factors combined, such as spatial expansion, roads, ports, and railways equipped with capabilities, all of which led to increased commercial development, and thus to more urban growth such as the establishment of new cities..., and the trend of urban growth continued continuously, so that despite the division of the empire into three royal governments, the wave of urban growth remained continuous and in a noticeable manner.

2.1.3. The Third Stage: Urban Revival

This stage extended from the fall of the Roman Empire in the fifth century AD until the occurrence of what is known as the Industrial Revolution, this period witnessed an urban dark age, but over time, some cities were able to regain some of their lost political, economic, and religious importance, as this period extended throughout Europe, establishing what became known as the Industrial Revolution, marking a new phase of urban growth.

As commercial activity flourished and expanded during this stage, urban growth expanded across the European continent, and increasing numbers of people were absorbed into trade and crafts, where urban growth itself was conditioned by the protection enjoyed by merchants and craftsmen at the time, as this stage witnessed an increase in the number of urban settlements or small towns.

2.1.4. The Fourth Stage: Rapid Urbanization

With the beginning of the sixteenth century, a new phase of urban growth began, marked by several factors whose influence on urban growth rates became so pronounced that many historians have dubbed it "equilibrium", as the first manifestation of this balance was the Agricultural Revolution, where urban growth was coupled with a shift from agricultural businesses and activities to industrial, commercial, and service activities, which began to flourish in industrial urban centers. This was followed by the technological revolution, which served as the prominent starting point for urban growth in the modern era, as for cities to become more than just religious and administrative centers, a technological and organizational revolution was necessary.

The growth of many cities and the urbanization of numerous regions in many countries around the world were due to successive scientific discoveries and mechanical inventions, where transportation is considered one of the most influential and effective scientific discoveries in determining the path of modern urban growth, as these discoveries, along with the changes they brought to various products, served as the attractive forces that enabled the increasing number of immigrants to the city. Urban growth in this modern phase was linked to increased efficiency of transportation, because Cities depend on trade and

the development of global markets, and thus the increased efficiency of long-distance transportation has had a significant impact on driving urban growth; Urban growth has also been accompanied by radical changes in the functional basis of the modern city, clearly reflected in its ecological structure, with industrialization taking center stage between urban growth and ecological change, the latest approaches to urban growth have been characterized by the phenomenon of urban deconcentration, a counter-trend to the population concentration that characterized the early stages of modern urban growth.

Consequently, the city is no longer a center of population attraction, and the surrounding areas of major cities have emerged, including suburbs, urban fringes, and satellite cities, as the introduction of land transportation, represented by the use of private and public cars, the introduction of electricity, tunnels, and the paving of roads... has helped to reduce the effect of the spatial distance factor in determining the size of the city, and has facilitated the spread of urban patterns of land use beyond the traditional and official boundaries of cities and major urban centers, which has created a kind of close connection between the city and the surrounding areas, thus, what appears at first glance to be a population infiltration may appear to be a redistribution of the urban population within the metropolitan region.

2.2. Urban Growth Theories:

Today, humanity is witnessing an unprecedented phenomenon of urbanization and urban growth. This necessitates realistic, scientific urban planning, especially since cities began to grow significantly in the late nineteenth century, with millions of people living in them, which calls for the emergence and development of theories of a planning nature, i.e., theories and laws that do not attempt to study and explain the phenomenon

of urbanization as much as they attempt to intervene in it, understand it, and control it, in a way that serves human well-being and makes life easier and more comfortable in these cities; Among these theories are:

2.2.1. The Concentric Circle Theory (O. W. Burgess):

This is considered one of the first theories to address social planning in cities or the ecology of urban centers, as it is also one of the theories that explore areas of concentration, where Burgess made a distinguished contribution that reveals a profound influence from early ecologists in his book, "The Growth of the City," an introduction to a research project that included his well-known study on growth patterns and the composition of functions in the city of Chicago, as he was interested in developing ecological theory (Al-Sayed Abd Al-Aati Al-Sayed, 1974, p. 403).

To evaluate this, he attempted to develop a model and graphic description of the way the city grows and its spatial organization, using an ecological map of Chicago as the basis for his research; and to achieve his objectives, he addressed the city's growth in light of its physical extension and spatial differentiation, starting from the basic idea that land prices and accessibility reach their highest in the city's commercial core, then gradually decline with distance from the central area, he then developed another basic idea, namely that land prices and accessibility reach their highest in the heart of another city (Hanfi Awad, 1986, p. 40), which means that the city grows within five rings, or decreasing, concentric zones (Mohamed Hafed, 1987, p. 29); These rings are:

- **The Central Business District:**

This area is located at the center of the city's ecological distribution and constitutes the vital core economically, socially, and culturally, it is a transportation intersection and the most accessible part of the city, as the city's most intense activities take place there, and it is home to numerous theaters, cinemas, specialty stores, major hotels, administrations, commercial offices, and banks.

The advantageous location of the central business district and its ease of access have led to increased demand for land and its high prices, this is the reason that led Burgess to say that businesses that achieve relatively high profits and use land intensively are the ones that can be located in the first zone.

- **The Transitional Zone or the Transition Zone:**

The urban expansion and growth that the central business district is experiencing leads to the transitional zone being subject to constant change, which is characterized by population density, a marked decline in per capita income, and the spread of social ills such as social disintegration.

The residents of this zone are particularly racial and ethnic minorities, recent immigrants, homeless individuals, and the marginalized; Because housing and professions in the transitional zone are socially unacceptable, they are usually described as depraved and morally and physically corrupt, according to Burgess theory, the first zone expands physically through the processes of invasion and occupation at the expense of the second zone, which also expands and invades the adjacent zone.

- **Worker Housing Area:**

This area is inhabited by blue-collar workers, clerical professionals, and children of immigrants, they aspire to improve

their children's standard of living and advance them up the social ladder.

- **Better Residential Area:**

This area includes single-family housing, local business districts, luxury apartments and condominiums, and some residential hotels, this area is inhabited by white-collar workers, professionals, and small entrepreneurs.

- **Commuter or Suburban Area:**

The commuter area is located outside the city limits and represents a residential area for high-income earners, it can also be home to some specialized neighborhoods, and it consists of the upper and upper middle classes, and most of its residents are commuters (Al-Sayed Al-Husseini, 1981, pp. 131-134).

From the above, we find that Burgess's attempt clarified:

- The city grows and expands in the form of rings and circles, and these circles represent successive areas of urban expansion.
- Burgess takes the idea of growth and expansion as a starting point for studying the processes of conquest and occupation, meaning that the expansion of central businesses leads to their conquest of a second area, and the expansion of the latter leads to the conquest of a third.
- The greater the distance from the city center, the greater the tendency toward increased land sizes and a decrease in the density of ownership.

Criticism of the Concentric Circle Theory:

Through his theory, Burgess attempted to formulate an ideal model for studying the growth of the city in light of its physical expansion and spatial differentiation, similar to the ideal model

formulated by Max Weber for the study of bureaucratic organizations, as the first thing that can be noted is that, when formulating his ideal model, Burgess did not anticipate that the concentric circle pattern would exist in every city, where he anticipated variations and distortions from this pattern, attributing them to factors such as natural and human obstacles, previous land use, political interference in the form of planning, and available means of transportation.

Despite the benefits Burgess achieved, it still raises many questions to which it has not provided satisfactory answers, and it is also not without gaps and weaknesses, which can be summarized as follows:

- Diversity in land use within each region and city.
- Arbitrary definition of regional boundaries.
- The lack of Americanization of Burgess's model.
- Limite of generalizability.

Burgess's testing of ecological variable (Hamid Kharouf and others, 1999, pp. 24-26).

These criticisms were made by urban ecologists, and most of them relate to the limitations of Burgess's ideal model and its flaws and shortcomings, where some advocates of Burgess's theory add further criticisms based on American studies, which we summarize as follows:

- The central area does not necessarily have to be circular.
- Different housing types may exist in many parts of the city.
- The location of heavy industry, which Burgess considered a distorting factor, may not be so in some cities.
- Industry is not found only in transitional areas.
- In many cities, there is a correlation between the location of industry and housing for low-income workers, confirming the inconsistency of this model with reality, as it has been applied temporarily to some American cities that grew rapidly as a result of immigration.

2.2.2. *Sector Theory: Homer Hoyt*

This theory emerged in the late 1930s (1939) as a response to criticisms of Burgess's theory, as Hoyt presented a conceptual framework attempting to define the ecological pattern of the city in light of the sector concept, and he explained that the identification of sector residents or social class residents depends on rental values. To clarify this, he specifically studied the variable of income, revealing that what determines the spread of residential areas is individual income, while what disrupts the internal structure of cities are the roads leading from the city center to the outskirts.

Based on Hoyt's specific understanding of city growth, he asserted that urban growth is determined by the extension of the prevailing land-use patterns, and he viewed the city as a circle and the different areas as sectors, as well as he also explained that urban growth occurs most rapidly along major transportation lines and along the lines of least resistance.

Criticism of the Theory:

Among the criticisms directed at this theory are the following:

- Its limitations and narrow scope of application, due to its starting point being a specific ecological pattern that reflects the reality of some cities in a particular historical period.
- It ignores the historical dimension, which profoundly influences ecological construction, where Francis Hauser emphasized the importance of this dimension in urban studies, therefore, the sector theory's application is limited to a few European cities, making it difficult to generalize it to the rest of the world's cities.

2.2.3. The Multiple Nuclei Theory:

This theory emerged in the mid-1940s by Harris and Allman, attempting to arrive at an explanation of the ecological pattern, as this theory is based on a fundamental idea that asserts that urban growth does not depend on a single nucleus, but rather on multiple nuclei, and that four factors influence the distribution of activities – the establishment of nuclei – in the city.

- A. Some activities require special facilities, located in specific parts of the city.
- B. Some activities benefit from being located in a single location.
- C. Some activities tend to be incompatible.
- D- Some businesses are unable to obtain prime locations, which forces them to seek less desirable locations with lower rents.

These theories have formed an intellectual framework that reflects a distinct trend in the study of the ecological pattern of the city, however, there are differences between the three theories, due to the perspective each adopts and the way they view this pattern.

Despite the multiplicity of visions and concepts for interpreting urban ecological structures, classical ecological theory has been subjected to a harsh critique, encompassing the following points:

- The basic assumptions upon which this theory is based.
- The role of competition as a quasi-social phenomenon.
- The boundaries between social and quasi-social phenomena.
- The spatial nature of human activity.

2.2.4. Modern Ecological Theory:

This represents a new model of the early ecological theory formulated by Park, Burgess, Hoyt, McKeetry, Allman, and Harris, it is based on the fundamental idea that ecological theo-

ry, like any other sociological theory, must encompass the entire range of social phenomena, as the works under this theory have appeared in two groups; for clarity, the positions are discussed according to the thinkers:

The position of Quinn: He limits the subject of ecology to problems related to the division of labor and its impact on spatial and geographical distribution, as he believes that the various problems facing society cannot all be subjected to ecological analysis, which calls for greater attention to the reciprocal relationships between groups and the environment, where most of his work has focused on applying environmental principles and the concepts of the urban local community and the urban center or metropolitan area (Fadia Omar Al-Julani, 1984, p. 76).

The position of Amos Hawley: He presents a new theory that serves as a bridge between early ecological theory and current ecological theory (Al-Sayed Al-Husseini, p. 410), as the previous foundations upon which this theory is based can be summarized in the following points:

- The subject of ecology revolves around how individuals sustain themselves in an ever-changing environment.
- The local community constitutes the unit of analysis.
- The study of individuals as members of groups.
- The spatial dimension.
- The temporal dimension: Hawley's emphasis on daily interaction adds a new dimension to the study of the local community, namely the temporal dimension.
- The integration of psychological and ethical aspects.
- The interconnectedness of subsistence activities aligns with prevailing values.
- The inseparability of biological, parasocial, cultural, and social phenomena.

- Cultural adaptation is considered a legitimate topic in ecological analysis.

Third: Aspects and Factors of Urban Growth:

1- Aspects of Urban Growth:

We can distinguish two basic types or aspects of urban growth, which have captured the vast majority of urban aspects in our understanding: demographic and ecological, a third aspect, the organizational aspect, can also be added.

A- Demographic Aspect:

Ancient cities were characterized by being smaller by modern standards, as despite their small size, they were noticeably fewer in number, whereas the size of early cities was determined by several economic, social, and political factors, such as fear of revolution and ensuring control, which was the most reasonable and realistic explanation for determining the size of early cities, in both ancient and modern history, the largest urban centers did not account for more than 1-2% of the population, meaning that between 50-90 farmers supported only one urban resident.

By the beginning of the nineteenth century, the demographic manifestations of urban growth were clear and prominent, as Western Europe started from scratch, yet its cities not only reached the level of the cities of the Roman era or the Middle Ages but also quickly and steadily advanced; At this particular time, urban growth took off based on the achievement of new areas and markets, and the significant rates of progress in agricultural production and means of transportation, to open up new areas and markets and increase the rates of productive activity in the industrial field, where the Industrial Revolution and the radical transformations and changes associated with it represented a modern civilizational revolution in the nineteenth century, not in the sense of the emergence of some cities

here and there, but in the sense of the movement of large numbers of the country's population to reside and live in cities and major urban centers; From this logic, some researchers, such as Kingsley Davies, tend to choose the period from 1500 to 1950 as if it represents a distinct trend of urban growth in the modern era.

This phase, spanning approximately a century and a half, is characterized by the expansion of international trade to such an extent that residents of major cities and urban centers could source their living necessities from increasingly vast geographic areas, as the entire world effectively became the hinterland of modern cities, however, contemporary urban growth trajectories, and conditions diverge significantly from historical patterns, as the 21st-century city of one million inhabitants differs fundamentally from its 19th-century counterpart, even if they share the same population size.

The proliferation of 20th-century cities—some reaching 5 to 15 million residents—reflects not merely quantitative differences but profound qualitative shifts in urbanization dynamics, one of the most notable recent trends is the outward expansion of major cities beyond their administrative boundaries, a phenomenon rooted in the 19th century but intensifying markedly in recent decades.

While metropolitan regions have experienced overall population growth, central cities (Central Cities) have seen declining growth rates compared to their peripheral zones, this trend underscores a spatial redistribution within metropolitan systems rather than a mere decentralization, where Warren Thompson's analysis of 44 U.S. metropolitan areas during the early 20th century (1900–1940) revealed striking patterns:

Peripheral zones grew three times faster than central cities (13% vs. 4.2%).

Rural areas within metropolitan regions even surpassed urban zones in population growth rates.

Thompson concluded that population growth rates escalate progressively with distance from central cities, signaling a transformative shift in urban spatial organization (Al-Sayyid Abd Al-Aati Al-Sayyid, 2000, pp. 132-135).

A. The Ecological Aspect (Al-Sayyid Abd Al-Aati Al-Sayyid: op. cit., p. 139):

Among the most distinctive features of early urbanization was the establishment of cities for purposes of defense, worship, and trade—activities that characterized ancient cities in regions such as Madar, India, and Greece for extended periods, these cities also functioned as political centers entrusted with administrative and military responsibilities, thereby becoming natural habitats for ruling elites who monopolized military power and religious-economic authority.

The functional characteristics of ancient cities inevitably influenced their ecological structure and the spatial organization of populations and activities; Geographically, economic factors and socio-political forces played a significant role in determining the locations of early urban settlements, as many ancient cities emerged and developed along land and maritime trade routes, such as Istanbul and Samarkand, whose strategic locations contributed to their prominence as major commercial hubs, however in ancient Egypt, the selection of a capital city was contingent upon the preferences of successive pharaohs, leading to the abandonment of previous capitals in favor of new ones.

Ecologically, ancient cities were marked by physical isolation and autonomy, whereas the predominant urban model during this early phase of urbanization featured cities encircled by fortified walls, which served defensive purposes aligned with the

technological capabilities of the era, as these walls also regulated commercial activities into and out of the city. Internally, partitions and barriers divided neighborhoods, reflecting ecological, cultural, ethnic, occupational, and kinship-based segregation among inhabitants.

The spatial distribution of populations and activities within these cities was shaped by prevailing economic and social organizational frameworks; Ecologically, cities were divided into isolated districts based on criteria such as lineage and occupation—a natural outcome of the rudimentary transportation technology of the time.

Moreover, the simplicity of transportation methods and the tendency of populations to reside near their workplaces contributed to another defining characteristic of ancient cities: severe overcrowding and densely clustered buildings, resulting in narrow, winding streets.

On the other hand, ancient cities lacked distinct land use patterns, whereas modern cities are known to use the same spatial unit or building for more than one purpose, as is the case with medieval cities, due to the urban growth trends of this period, which represented a revival and renewal of urban life that had disappeared with the fall of the Roman Empire, therefore, this intermediate phase of urban growth did not reveal anything new except for the expansion of some cities, the dominance of commercial activity over the functional basis of the city, and finally, the emergence of many capital cities, extending urban life to new and diverse locations around the world.

With the entry of urban growth into its modern phase, especially since the Industrial Revolution in Europe, cities have witnessed widespread ecological changes through a series of ecological processes, the most important of which are isolation and urban sprawl.

B. Spatial Segregation:

Spatial segregation refers to the physical separation between various activities and population groups, as previously noted, urban growth has been associated with significant shifts in the functional foundations of modern cities and fundamental modifications in demographic elements, consequently, this necessitates radical transformations in the spatial distribution patterns of populations and activities, as well as in the spatial arrangements organizing them, because, with population growth, cities inevitably fragmented into distinct zones dominated by specific land-use patterns, the separation of residential areas from workplaces and diverse urban activities emerged as a prominent feature of ecological change, paralleled by clear spatial division and the diversification of economic activities in modern cities, additionally, residential neighborhoods became differentiated based on the socio-economic status of their inhabitants.

Industrialization occupies a central role among factors driving urban growth and the ecological transformation of modern cities, over time, population growth in cities—combined with intense competition for central locations in major urban areas, the inadequacy of residential zones in these areas for large segments of the population, and the evident failure to develop new housing in inner-city regions—collectively propelled residential expansion beyond city boundaries, as this process was further accelerated by advancements in public transportation and the widespread adoption of electricity, where these dynamics underscore key outcomes of contemporary urban growth trends:

- The Unplanned Expansion of Metropolitan Centers: The emergence of large metropolitan hubs reflects unintended consequences of interacting forces that lacked comparable influence in earlier urban growth phases.

- Population Deconcentration in Central Cities: A persistent decline in population growth rates within major city boundaries compared to other parts of metropolitan regions.
- Suburbanization and Peripheral Development: Evident in rising daily commuting rates for work, education, commerce, or leisure between urban cores and their peripheries.

c. Organizational Dynamics (Al-Sayyid Abd Al-Aati Al-Sayyid: op. cit., p. 145):

Early economic developments played a pivotal role in humanity's transition to settled life, initially marked by advancements in agriculture, animal domestication, and rudimentary craftsmanship, although cities first emerged as economic mechanisms in ancient Eastern civilizations, population growth enabled the evolution of labor division systems, increasing production rates and agricultural surpluses, which allowed larger numbers of individuals to specialize in non-agricultural roles; on the other hand, Early urbanization introduced critical economic elements such as property ownership, labor, economic power, and welfare, alongside basic economic organizational forms—specialized guilds of merchants and artisans, state regulation of agricultural cycles and trade, and the delineation of private property rights.

Early urban growth coincided with significant organizational shifts, particularly in the economic sphere, and with the advent of the technological revolution—especially in industry and transportation—urbanization entered a new phase, as increasing labor specialization accelerated technological progress, facilitating industrial enterprises and factory systems that triggered cascading socio-economic and organizational changes, where market expansion and centralized governance fostered

mass production, epitomized by the industrial city, which reflects the complexity of the modern economic organization, thus, urbanization has historically driven transformative shifts in the means of livelihood, propelling societies toward heightened economic and social complexity.

These organizational developments paralleled technological advancements and demographic shifts, particularly as traditional pre-urban social structures failed to meet the demands of modern urban life, consequently, the proliferation, diversification, and intricacy of urban institutions became imperative, surpassing even the necessity of technological innovation. The organizational changes accompanying urbanization reverberated across all facets of urban social life, from family structures to relationships between urban communities and governmental institutions, as among the most evident outcomes was the bureaucratization of society, which fundamentally altered systems of status and class stratification, where external influences increasingly overshadowed local determinants in shaping individual social standing.

In this regard, scholars such as Oscar Lewis, Max Weber, Josiah Strong, Émile Durkheim, and Marshall Clinard have emphasized the psychological and social repercussions of urbanization, as their works often reveal a pronounced "anti-urban" bias, highlighting phenomena such as alienation and anomie—key concepts framing the adverse psychological and social effects of urban growth on individual identity, interaction patterns, and behavioral norms, where these pessimistic critiques of urbanization are rooted in observations of fragmented social bonds and the erosion of traditional value systems in urban settings.

2. Urban Growth Factors:

Urban growth, which is the continuous increase in the proportion of the urban population to the total population, is based on four factors:

- Natural population growth.
- Migration from within and outside the country.
- The integration of villages and rural areas into cities.
- Municipal and regulatory administrative decisions by which some rural population centers are classified as urban.

The importance of each of these factors varies depending on the stage of urbanization, as when urbanization levels are relatively low—especially when there is little difference between fertility rates of the population in rural areas compared to urban areas—migration is one of the reasons for the difference in growth rates between urban and rural areas; while in cases where urbanization levels are high, the rate of natural increases in the size of the urban population has a more effective impact in determining the rate of increase in the proportion of the urban population to the total population.

Furthermore, when economic opportunities expand rapidly in urban population centers, incoming migration is a more influential factor in the continued growth of these urban areas; In general, natural population growth rates in urban areas are typically lower than in rural areas; however, the impact of migration varies from country to country, and within a country, from region to region.

The integration of villages and rural areas into cities is another factor driving urban growth, undoubtedly, the urban expansion of many small and medium-sized cities often leads to the integration of these cities with neighboring villages and desert areas. It is worth noting that the proportion of Bedouins relative to the population is gradually declining due to their

shift from nomadism to urbanization, in addition to government efforts to settle Bedouins and encourage them to settle.

As for the municipal and regulatory decisions by which some rural communities are classified as urban, in Arab countries in general, this is based on the availability of certain services, such as health and education services, or the population growth in these rural communities, which results in increased state financial allocations and an expansion in the size of the administrative apparatus, which is not based on changes like economic activities.

Despite the classification of these communities as urban areas, the rural cultural background of their inhabitants remains evident in their social behavior and is even prevalent among rural migrants to cities, as migration, both internal and external, represents the most important factor causing urban growth at the level of a single country¹, because migration is an unnatural population increase that causes urban growth (*Journal of Gulf and Arabian Peninsula Studies*, 2003, pp. 52-57), leading to a natural, human, regional and ecological increase, which adds a continuous addition to the city in terms of services and facilities, which necessarily requires different groups of education and health services to meet the needs of the urban development plan, by introducing everything that increases the vitality of the urban structure, it is required that the urban population advances in quality and increases in quantity, and it is most likely that the "growth of large cities" before the industrial revolution was due to the factor of migration (Mohamed Qabari Ismail, pp. 379, 380).

Analysts often consider rural-urban migration a premature process, resulting in premature urban growth, as Egypt, Iraq,

¹ Abrams Charles: *The City and Housing Problems*, translated by a committee of translation professors, Good Horizons, Beirut, undated.

Jordan, Algeria, Libya, and other Arab countries are considered overly urbanized, meaning that the level of urban development achieved by these countries does not meet the requirements for productively absorbing migrants, because urban economic sectors have not expanded sufficiently to create jobs and employment opportunities for migrants, on the contrary, these migrants become a heavy burden on city life. And because cities are trying to avoid the emergence of unemployment and the complex problems associated with it, they direct their efforts to absorb some of these migrants into sectors that add little to their economic base, thus, a high percentage of the workforce in major Arab cities, especially capitals, works in service jobs with low returns, and the real productivity of these cities only adds marginal benefits, as this premature urban growth began after the city itself was not prepared for this rapid expansion in its population numbers and in the services that must accompany such population growth.

Early urban growth often occurs in cities when they experience rapid changes and economic booms that force them to establish new activities and create more productive sectors, as these forces act as a pull force, affecting the surplus labor in the surrounding rural areas, where hundreds of rural residents are forced to leave for the city. Because the city lacks plans and absorption programs, urban growth problems arise (Abd Al-Ilah Abu Ayyash, 1980, pp. 149-154), accordingly, the factors of urban growth can be explained through Costello's study on the analysis of urban growth in Middle Eastern societies, as follows:

Urban population growth began to increase gradually, especially after World War II, this element was considered a factor in the factors of modern urban growth in Middle Eastern cities, where the rural-urban changes that occurred in Middle Eastern

cities had a significant impact on the interest in analyzing the factors of rapid urbanization and its manifestations in the Middle East. Costello's study on urbanization in the Middle East, published in his book of the same title in 1997, translated the global interest in analyzing the features of urbanization and urban growth in Middle Eastern societies, as he limited these factors to: political centralization, internal conflict, changes in trade patterns and foreign relations, and the discovery and exploitation of oil, however, his analysis was not limited to these factors alone, as he also emphasized the factor of internal and external migration, external and internal cultural contact, and the increase in population size in urban areas.

To determine the effectiveness of these factors identified by Costello in the urban growth process in Middle Eastern cities:

- a. **Political Centralization:**Some Middle Eastern countries, such as Syria, Lebanon, and Iraq, were influenced by European government management patterns, where administrative and political functions were concentrated in the capital, giving them a special status that helped attract immigrants.
- b. **Political Struggle and Encouraging Urban Growth:**Costello argued that the migration of people to certain urban areas as a result of political struggle affected the population growth of some cities.
- d. **Changes in Trade Patterns and Foreign Relations:**The growth of international air transport emphasized the importance of the Middle East's geographical position between Asia, Africa, and Europe, which led to an improvement in the status of some cities, in addition to foreign and international relations, the changes that occurred at this level had an impact on the growth of commercial and administrative activities in the cities.

Conclusion

Finally, there is the oil factor, which has significantly contributed to urban growth and development by creating opportunities for investment and technology imports, thus strengthening the economic position of producing countries, and enabling them to provide the conditions conducive to urban life.

Another factor contributing to urban growth is the advancement of technology, which has benefited developing countries, given their economic capabilities, which has enabled them to import advanced technology, helping to improve urban conditions. Another important factor is internal and external migration to cities, given their focus on education and manufacturing within their surroundings, and their improved commercial activity, Arab cities have been a hub for the migration of technical, intellectual, and scientific talent from abroad, as well as for residents of smaller cities and rural areas, however clear these factors may be, each country in the region has its unique circumstances that expose it to the influence of various factors affecting urban growth. (Fadia Omar Al-Golan: op. cit., pp. 147-148)

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Authenticity and Globalization: The Paradox of Preserving African Heritage in the Digital Age

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Abstract

In the context of global expansion and the rapid advancement of digital technologies, the preservation of African heritage faces significant challenges and opportunities. While digital tools provide unprecedented means to document, disseminate, and revitalize cultural and historical traditions at risk of erosion, globalization simultaneously imposes homogenizing pressures that threaten the authenticity and integrity of these heritages. This paradox necessitates a critical examination of the intersection between conservation and transformation, as well as the role of local stakeholders in mitigating the impacts of global influences. This study investigates the interplay between authenticity, digital innovation, and globalization, emphasizing strategies to reconcile heritage preservation with contemporary advancements.

Keywords: African heritage, Cultural authenticity, Globalization, Heritage preservation, Paradox

Authenticité et mondialisation : Le paradoxe de la préservation du patrimoine africain à l'ère numérique

Résumé

Dans le contexte de l'expansion mondiale et de la progression rapide des technologies numériques, la préservation du patrimoine africain se trouve à un carrefour critique. D'une part, les outils numériques offrent des opportunités sans précédent pour documenter, diffuser et revitaliser des traditions culturelles et historiques souvent menacées. D'autre part, la globalisation exacerbe les pressions uniformisatrices, menaçant l'authenticité et l'intégrité de ces patrimoines. Ce paradoxe soulève des questions complexes sur la frontière entre conservation et transformation, ainsi que sur le rôle des acteurs locaux face aux influences globales. Cette analyse explore les dynamiques entre authenticité, innovation numérique et mondialisation, en mettant en lumière les stratégies nécessaires pour harmoniser préservation et modernité.

Mots clés : *Patrimoine africain, Paradoxe, Authenticité culturelle, Mondialisation, Préservation du patrimoine*

Introduction

In an ever-changing world where globalization is reshaping cultural identities, African artistic and cultural heritage stands as a unique testament to diversity and authenticity. However, this heritage now finds itself at a critical crossroads: how can its essence be preserved while meeting the demands of a modernity marked by digitalization and cultural homogenization?

Technological advancements, particularly digital tools, offer powerful means to document, promote, and disseminate this heritage globally. Yet, they also raise major challenges: the decontextualization of works, cultural appropriation, and the dilution of symbolic meanings. In this context, how can authenticity and innovation be reconciled without falling into folklorization or reductive commercialization?

Furthermore, what institutional, technological, and community-based mechanisms can ensure dynamic preservation—where heritage is not merely archived but continuously reinterpreted and reinvigorated by new generations? This reflection questions the limits of traditional conservation models and calls for the development of hybrid strategies that blend endogenous knowledge with emerging technologies.

Objectives:

This study examines the challenges and opportunities posed by digitization and globalization for the transmission of African cultural heritage. It explores risks such as symbolic loss and cultural decontextualization while identifying the potential for greater visibility through emerging technologies. The research analyzes innovative preservation models—including blockchain for artwork authentication, AI for reconstructing lost traditions, and collaborative virtual museums—assessing their alignment with the values of source communities. It proposes

an ethical and methodological framework for "living" heritage preservation, ensuring that traditional knowledge holders actively shape their digital representation. Additionally, the study evaluates the impact of cultural mediation tools (augmented reality, metaverses) on how younger African and diasporic generations reclaim and reinterpret their heritage. The overarching goal is to develop inclusive, rights-based strategies for digital preservation that align with contemporary dynamics.

Hypotheses:

1. Responsible use of digital technologies (e.g., decentralized archives, blockchain certification) could strengthen—rather than compromise—heritage authenticity by safeguarding provenance and context.
2. A "glocal" (global + local) approach to digitalization, co-designed with communities, would foster more inclusive preservation, minimizing external biases.
3. Technological innovations, coupled with cultural education, could transform homogenization risks into creative reappropriation (e.g., cultural remixing, hybrid artworks).
4. The resilience of African heritage in the face of globalization may depend less on rigid preservation of the past than on its ability to inspire contemporary creations rooted in its symbolic codes.

These hypotheses collectively suggest that technology, when thoughtfully implemented with community participation, can serve as a bridge between tradition and modernity. Rather than viewing digital tools as threats, they could become enablers of cultural continuity, allowing African heritage to evolve while maintaining its core identity. This perspective shifts the narrative from passive conservation to active cultural innovation.

1. The Paradox of Authenticity and Globalization

As cultures strive to preserve their authenticity while adapting to global influences, tensions between tradition and globalization emerge as a crucial area of inquiry. Global interconnectedness facilitates cultural dissemination, yet it also poses risks to local heritage by promoting standardization. Understanding this paradox requires a reassessment of authenticity in a world where traditions evolve in response to external influences.

1.1. Defining Authenticity in African Heritage

Authenticity in African heritage extends beyond mere adherence to traditional forms; it is a dynamic concept encompassing historical continuity, social interactions, and contemporary transformations. Authentic practices—whether religious rituals, community ceremonies, or oral traditions—serve as both collective memory and evolving identity. The transmission of intergenerational knowledge, coupled with local adaptations and external influences, shapes the meaning of authenticity. (DIADJI, 2003)

Cultural expressions such as music, oral literature, and theatrical performances illustrate this evolving nature. Polyphonic songs, ancestral storytelling, and the epic narratives of griots continuously adapt to contemporary contexts while retaining their core essence. Similarly, art objects, including ritual masks, sacred sculptures, and symbolic textiles, derive authenticity not merely from their material composition but from their cultural significance and the communities that recognize their value.

However, globalization complicates the definition of authenticity. Cultural practices modified for international audiences and art objects reinterpreted outside their original contexts raise critical questions about their legitimacy. Authenticity, therefore, should not be viewed as a fixed attribute but as an

evolving concept that balances historical fidelity with contemporary relevance. A multidimensional approach to authenticity is necessary – one that respects historical roots while embracing innovation, ensuring that heritage remains a dynamic and meaningful force in cultural identity.

1.1.1. The Impact of Globalization on Local Traditions: Opportunities and Challenges

Globalization has profoundly influenced societies and cultures worldwide, fostering unprecedented connections and exchanges. While it offers valuable opportunities for cultural preservation, education, and innovation, it also raises concerns about authenticity and marginalization.

1.1.2. Opportunities: Cultural Revitalization through Interconnection

Global connectivity has emerged as a powerful force in preserving and celebrating endangered traditions, breathing new life into cultural practices that were at risk of fading away. The advent of digital platforms has played a key role in this transformation, offering unprecedented access to cultural knowledge and creating avenues for communities, especially in historically marginalized regions, to actively participate in cultural conservation. These platforms have also unlocked entrepreneurial opportunities, enabling artisans and creators to showcase their heritage globally. For example, traditional crafts and indigenous knowledge systems are finding new expression through contemporary design, blending the old and the new in a way that resonates with modern audiences while maintaining authenticity. Furthermore, globalization fosters interdisciplinary collaborations, bringing together diverse cultural perspectives to tackle pressing global issues like climate change, public health, and resource sustainability. Such partnerships enrich

problem-solving approaches by integrating traditional wisdom with modern scientific techniques. Global markets, meanwhile, have opened economic doors for local artisans, allowing them to reach international audiences and promote sustainable development in their communities. However, with these opportunities come challenges: exploitation, cultural appropriation, and the dilution of heritage are real risks. Ethical oversight and fair trade practices are essential to ensure that cultural preservation efforts genuinely benefit the communities they originate from and respect the integrity of their traditions. In this dynamic landscape, the harmonious interplay between innovation and preservation is crucial for safeguarding cultural heritage in an increasingly interconnected world.

1.1.3. Challenges: Cultural Erosion and Homogenization

Despite the undeniable advantages of globalization, it poses significant risks to the integrity of local traditions. One of the gravest concerns is cultural homogenization, where unique and meaningful traditional practices are reshaped to cater to global consumer preferences. As a result, the original essence and significance of these traditions are often diluted. The commercialization of culture further exacerbates this issue, reducing deeply rooted customs into superficial, commodified versions that lack their historical and cultural depth. This shift not only distorts public perception of these traditions but also undermines the communities that uphold them. Moreover, the dominance of global cultures frequently leads to the marginalization of local traditions. Languages, spiritual practices, and indigenous knowledge systems—rich repositories of human heritage—are often abandoned in favor of lifestyles aligned with global norms. This trend threatens cultural diversity and weakens the intergenerational transmission of heritage, disrupting the intri-

cate balance between preserving the past and embracing the future. To address these challenges, a nuanced approach is required. Cultural preservation must be prioritized through initiatives that empower local communities to protect their heritage while also accommodating necessary adaptations. Ethical frameworks should guide the integration of traditional practices into global contexts, ensuring that communities retain ownership of their cultural expressions without falling prey to exploitation or erasure. By fostering mutual respect and encouraging inclusivity, globalization can evolve into a force that celebrates diversity rather than eroding it.

1.2. Balancing Modernity and Preservation

Navigating the complexities of globalization demands a thoughtful strategy that harmonizes progress with the preservation of cultural identity. Digital technologies offer transformative opportunities to document, enhance, and perpetuate traditions without undermining their essence. For example, oral traditions, once passed from generation to generation through spoken word alone, can now be immortalized through immersive media formats such as virtual reality storytelling. Similarly, augmented reality applications can craft experiences where users interact with historical artifacts or traditional practices, fostering a deeper understanding and appreciation of cultural heritage. These technologies enable global dissemination of culture while respecting its authenticity. Education serves as a cornerstone in this process. By integrating cultural heritage into school curricula and encouraging interdisciplinary approaches, students can form meaningful connections with traditions while gaining diverse perspectives. This form of engagement not only enriches their learning experience but also nurtures an appreciation for cultural diversity and its relevance in addressing contemporary global challenges. Globalization should not

be perceived solely as a threat to tradition; rather, it presents an unparalleled opportunity to weave local cultural identities into the fabric of a global narrative. To achieve this, collaborative efforts between governments, communities, businesses, and international organizations are crucial. Policy frameworks should prioritize cultural diversity and establish ethical guidelines for engaging with heritage, ensuring that preservation efforts are free from exploitation or appropriation. In this interconnected era, safeguarding traditions becomes not just an act of conservation but a dynamic redefinition of identity—one that embraces both historical depth and modern innovation. (Forni, 2018)

1.3. The Role of Digital Technology in Cultural Heritage

Digital technology has emerged as a transformative force in the preservation and promotion of cultural heritage. By overcoming geographical and linguistic barriers, digital tools provide unprecedented opportunities for documentation and dissemination. However, their use must be carefully managed to uphold cultural integrity and inclusivity.

1.3.1. Documentation: Building a Sustainable Cultural Archive

Digital technologies are revolutionizing the landscape of cultural preservation by facilitating robust and enduring documentation of artifacts, manuscripts, and oral traditions. Virtual archives and digital museums serve as repositories of invaluable heritage, safeguarding these treasures from threats such as physical degradation, geopolitical conflicts, and environmental disasters. Advanced digitization techniques ensure that even the most fragile and obscure cultural assets are not only preserved but also made accessible to diverse audiences worldwide. Multimedia innovations, like virtual reality (VR) and

augmented reality (AR), elevate the preservation process by offering immersive experiences that bring cultural narratives to life. For instance, VR can transport users to reconstructed historical settings, allowing them to experience traditions and rituals as though they were present in the past. AR can overlay digital elements onto physical surroundings, enabling users to interact with cultural artifacts in a deeply engaging manner. These technologies do more than preserve physical objects; they capture the emotional and contextual essence of cultural practices, ensuring their significance resonates with future generations. Such dynamic approaches not only celebrate heritage but also foster global awareness and understanding, bridging cultural gaps through innovative storytelling methods. By leveraging the strengths of these digital tools, cultural preservation becomes a proactive effort to honor the past while inspiring future generations to embrace and protect their shared heritage.

1.3.2. Dissemination: Expanding Global Access to Cultural Heritage

Digital platforms have become vital tools in bridging cultural gaps by democratizing access to heritage that was once confined to specific regions or communities. These platforms empower marginalized traditions, granting them visibility and appreciation on a global scale. Online archives house extensive collections of historical records, artifacts, and oral histories, making cultural knowledge readily accessible to researchers, educators, and curious minds worldwide. Through interactive storytelling events, traditions are brought to life, allowing audiences to actively participate in their narratives. Virtual exhibitions eliminate geographical barriers, creating spaces where anyone, regardless of location, can explore and connect with cultural treasures. By integrating multimedia elements—such

as videos, soundscapes, animations, and interactive features – digital dissemination enriches the understanding of cultural practices. These tools add depth to traditional storytelling, helping users grasp the emotional and contextual significance of heritage. Virtual experiences, including immersive virtual reality tours of sacred sites or augmented reality interactions with cultural artifacts, enable deeper and more meaningful engagement with traditions. These innovations not only preserve the tangible and intangible aspects of heritage but also ensure its relevance in modern contexts, appealing to younger generations. Furthermore, these efforts combat the risks of cultural erosion by keeping traditions alive in the collective consciousness and fostering a sense of pride among communities. In this way, digital platforms are not just vehicles for preservation – they are dynamic spaces where heritage evolves, thrives, and continues to inspire in an increasingly interconnected world. (Bosc-Tiessé, 2018)

1.3.3. Challenges in Digital Heritage Preservation

Despite its transformative potential, digital heritage preservation presents complex ethical and technical challenges that demand careful navigation. One major concern is the standardization of cultural representations, which can oversimplify or distort the richness and diversity of traditions, reducing their depth and authenticity. The risk of misinterpretation arises when cultural practices are stripped of their original context, leading to misunderstandings or unintentional appropriation. Furthermore, unequal access to digital resources exacerbates global disparities, leaving marginalized communities at risk of being further excluded from the benefits of digital preservation. Governance structures play a pivotal role in addressing these challenges. They must establish ethical guidelines to ensure

that digital initiatives honor the integrity of cultural traditions and foster inclusivity. Policies should involve local communities in the decision-making process, enabling them to retain agency over how their heritage is documented, shared, and interpreted. To fully harness the benefits of digital technologies while mitigating their risks, strategies must prioritize ethical documentation practices. This includes preserving cultural context, ensuring accurate representation, and promoting equitable access to digital tools and platforms. By implementing such measures, digital innovations can serve as vehicles for cultural resilience, transforming heritage into a vibrant and accessible resource that evolves alongside the rapidly changing world while maintaining its essence and significance. (Djaber, 2023)

1.4. African Initiatives in Digitizing Artworks and Oral Traditions

Digitization stands at the crossroads of technology and cultural preservation, emerging as a transformative mechanism to address the multifaceted threats facing African artistic and cultural heritage. The erosion caused by time, the devastation of conflicts, and the pervasive impacts of neglect demand urgent and sophisticated interventions. Digital preservation transcends traditional archiving methods, offering dynamic solutions to both safeguard and promote the continent's vast tapestry of artworks and oral traditions. This paradigm shift is evident in numerous African-led initiatives that harness cutting-edge technologies such as machine learning, virtual reality, and decentralized digital platforms. Machine learning algorithms are being employed to reconstruct endangered oral histories and languages, ensuring their transmission across generations. Virtual reality tools immerse users in digitally recreated cultural environments, bridging temporal and spatial divides. Additionally, blockchain technology secures the authenticity and

provenance of artistic creations, protecting them from forgery or misrepresentation. These initiatives also emphasize the importance of community-centric approaches, where local custodians of heritage co-create digital archives and storytelling projects. By situating preservation efforts within the lived experiences of African communities, these technologies not only safeguard heritage but also empower cultural agency and innovation. Ultimately, digitization in Africa is not merely a defensive measure—it is a proactive effort to reimagine accessibility, ownership, and global appreciation of its cultural wealth. It amplifies African narratives in global discourses, fostering a renewed understanding of the continent's contributions to human civilization.

1.5. The Timbuktu Manuscripts: A Digital Testament to Africa's Intellectual Legacy

The Timbuktu manuscripts constitute an invaluable archive of African scientific, philosophical, spiritual, and historical knowledge, dating back to the 12th century. These fragile documents are more than physical artifacts; they represent centuries of intellectual and cultural wealth. However, they face ongoing threats from conflict, climate change, and neglect, putting their survival at risk. To address these challenges, a collaborative effort between African scholars, local communities, and international institutions has embraced digital technology to preserve and provide access to these manuscripts. Advanced imaging techniques have been used to scan, catalog, and store them in digital libraries, ensuring their content remains intact even if the original documents deteriorate. Beyond preservation, digitization democratizes access. Researchers, students, and history enthusiasts worldwide can now explore these texts, fostering greater appreciation for Africa's intellectual heritage.

Digital platforms also enable interactive engagement, allowing users to explore medieval African contributions to astronomy, medicine, and poetry in ways that connect the past with contemporary research. Moreover, this initiative challenges longstanding narratives that have historically overlooked Africa's role in global scholarship. The manuscripts underscore the continent's rich intellectual traditions, inspiring new academic inquiries and shifting perspectives on African history. The success of this project also highlights the importance of cross-cultural collaboration. Governments, NGOs, and technology companies have partnered with local custodians to fund, train, and sustain this mission, demonstrating the power of collective responsibility in preserving cultural diversity. When implemented ethically, modern technologies can work alongside traditional methods, ensuring that digitization enhances, rather than alienates, the heritage it seeks to protect. Looking ahead, the Timbuktu manuscripts exemplify how digital innovation can safeguard endangered heritage while making it relevant to new generations. By enshrining these treasures in the digital realm, we not only protect their legacy but also enable them to inspire future scholarship and global dialogue.

1.6. Afropop Worldwide: Digitally Amplifying African Music

In the evolving landscape of oral traditions, Afropop Worldwide has pioneered the use of digital technologies to document, promote, and celebrate African music. Through digital archives, podcasts, and interactive platforms, the initiative goes beyond conventional documentation to create an engaging and accessible space for African musical heritage.

Afropop Worldwide serves as a digital ecosystem where diverse musical traditions—ranging from ancestral rhythms to contemporary innovations—are preserved and shared globally.

Digital tools enable artists from remote communities, often marginalized in mainstream cultural circuits, to showcase their work to international audiences. Indigenous musicians and storytellers now have platforms to perform live, ensuring that their cultural expressions reach the global stage. Beyond preservation, Afropop Worldwide fosters cultural continuity by embedding heritage within modern digital spaces. Multimedia features such as behind-the-scenes podcasts, immersive performances, and virtual exhibitions allow users to engage with African music in interactive and dynamic ways. This approach transforms traditional music from a static artifact into a living, evolving art form. The initiative also plays a key role in inter-generational transmission. By presenting African musical heritage in contemporary formats, it resonates with younger audiences both on the continent and in the diaspora. Mobile-friendly content and interactive music tools empower African youth to reconnect with their cultural roots in ways that align with their digital lifestyles.

Despite these successes, digital preservation poses challenges. The commodification of cultural heritage for mass appeal risks oversimplifying traditional music, and the digital divide prevents equal participation in such initiatives. Ensuring inclusive representation requires efforts to expand access to digital tools and infrastructure across all communities.

Afropop Worldwide exemplifies how technology can intersect with culture to create a new paradigm for heritage preservation, celebration, and evolution. By fostering ethical digitization, funding initiatives, and training local artists, projects like this ensure that Africa's musical legacy remains vibrant, globally recognized, and deeply rooted in cultural pride.

1.7. Challenges in Preserving Authenticity During the Digital Transition

Digitization is transforming the preservation of African cultural heritage, offering tools to combat threats such as time, conflict, and neglect. However, it presents significant challenges to authenticity, which refers to maintaining the original values, contexts, and meanings of cultural elements. Cultural homogenization during digitization risks diluting the unique aspects of local traditions, while misrepresentation through incomplete metadata or incorrect interpretations can distort their essence. Furthermore, oral traditions and interactive cultural practices often lose their dynamic and experiential qualities in static digital formats. Ethical concerns also arise regarding who controls the digitization process, which can lead to unequal power dynamics and marginalize the custodians of the heritage. To overcome these obstacles, innovative approaches are needed. Multidisciplinary methods that combine advanced technologies such as augmented reality, virtual reality, and machine learning with anthropological research can recreate cultural heritage while respecting its authenticity. Community engagement is equally vital, allowing custodians to co-develop digital projects and ensuring their cultural agency. Ethical frameworks and localized strategies are necessary to address issues of ownership and representation while promoting inclusivity in preservation efforts. By balancing technological innovation with cultural integrity, digitization can safeguard Africa's rich heritage while empowering its global appreciation.

1.7.2. Digital Standardization: A Threat to Cultural Uniqueness

One major challenge posed by the standardization inherent in digital technologies is the potential for oversimplification in representing cultural artifacts. The technical constraints of formats for images, videos, and audio files often reduce the richness and complexity of cultural elements. A traditional textile, for instance, may appear visually appealing in a digitized format, yet its intricate texture, tactile essence, and craftsmanship might be lost in translation. Such losses diminish the experiential qualities that make the artifact culturally significant. Similarly, oral traditions, while effectively preserved through recordings, can become detached from the vibrant ritual and communal contexts in which they were historically performed. The rhythm, gestures, and spiritual atmosphere that breathe life into these practices are often difficult to replicate in digital media. This reduction can result in a static representation of oral heritage that undermines its dynamic and participatory nature. To address these challenges, efforts in digital preservation must go beyond technical reproduction and emphasize holistic representation. Techniques such as 3D modeling, immersive audio, or augmented reality could be employed to capture the sensory and contextual depth of cultural artifacts and practices. By pushing the boundaries of digital technologies, it is possible to preserve not only the physical form but also the intangible essence of cultural heritage, ensuring that its significance remains intact for future generations.

1.7.3. *Disconnection from Original Contexts*

Cultural heritage thrives within a rich tapestry of environments and social interactions, which breathe life and meaning into artifacts and traditions. These connections, formed through communal and emotional engagement, are often integral to defining the vibrancy of cultural practices. Digitization, while offering significant benefits in terms of preservation and accessibility, risks severing these dynamic relationships when cultural elements are translated into isolated digital formats. The shared spaces of physical, emotional, and collective interaction that traditionally house cultural practices play a crucial role in shaping their significance and reception. A poignant example can be found in the digitization of traditional dances using virtual reality. While the technology may faithfully recreate the physical aspects of the dance—movements, costumes, and music—it often falls short of capturing the communal energy that flows through a live performance. The emotional resonance shared between performers and audiences, the spontaneity of participation, and the storytelling embedded in the act are dimensions of cultural heritage that struggle to find full representation in a virtual medium. Thus, the cultural significance of the dance cannot be reduced solely to its visual or auditory components; it lies deeply rooted in its role as a vehicle for shared narratives, bonding, and collective identity. To bridge this gap, innovations in technology and methodology are essential. Emerging technologies such as immersive audio systems, multi-sensory integration tools, and interactive platforms have the potential to evoke communal spirit and foster emotional connections within digitized cultural experiences. For example, integrating the soundscapes of live environments with tactile feedback or synchronized movement simulation could create a more holistic representation of cultural practices. Furthermore, hybrid models that blend live performances with digital ele-

ments offer a promising avenue. These models allow audiences to experience the heritage in both its original social context and in expanded digital formats, creating new pathways for appreciation without compromising authenticity. Additionally, a thoughtful approach to the process of digitization must involve collaboration with cultural custodians and communities to ensure that the spirit of traditions is preserved. By emphasizing co-creation and actively incorporating local expertise and perspectives, digital initiatives can be designed to honor the integrity and lived experiences of cultural heritage. Ultimately, digitization should not aim to replace the organic connections tied to cultural practices but rather to complement them. It holds the potential to enrich cultural heritage, making it accessible to wider audiences while safeguarding its core values and meanings. Success in these efforts depends on striking a careful balance between technological innovation and the preservation of the experiential essence that defines heritage.

1.7.4. *Ethical Concerns and Cultural Bias*

The digitization of cultural heritage introduces significant ethical dilemmas, especially in terms of representation and ownership. One pressing concern is the tendency for external entities—such as organizations, researchers, or corporations—to undertake digitization projects involving marginalized communities without obtaining their informed consent. This practice not only infringes upon the rights of these communities but also fosters cultural appropriation, where heritage elements are exploited for profit or recognition without proper acknowledgment or benefits being directed to the original custodians. Additionally, editorial choices regarding which aspects of cultural heritage are selected for digitization can result in an incomplete or skewed portrayal of a community's identity.

These decisions, often shaped by external biases, may prioritize certain elements deemed more appealing or marketable while overlooking others that are vital to the culture's richness and complexity. This selective process risks fragmenting cultural narratives and reinforcing stereotypes, distorting public perceptions of the communities involved. To address these challenges, ethical frameworks must be integrated into the digitization process. Communities should play a central role in determining how their heritage is represented and shared, ensuring that their perspectives guide these projects. Ownership and control of digitized materials should remain with the communities, enabling them to decide how their heritage is accessed and utilized. Moreover, fair distribution of benefits derived from digital heritage initiatives is essential to foster equity and respect. By implementing these measures, the digitization of cultural heritage can evolve into an inclusive and empowering tool that honors the integrity of traditions and promotes cultural diversity.

1.7.5. *Balancing Preservation and Innovation*

The digital transformation of cultural works represents a turning point in the preservation and engagement with heritage, providing opportunities for broader access, revitalization, and creative reinterpretation. However, these advancements are accompanied by complex challenges, particularly concerning the authenticity and integrity of cultural elements. Preserving authenticity goes beyond simply retaining physical attributes; it involves safeguarding the original context, values, and meanings of the cultural work itself, which can often be altered — intentionally or unintentionally — through the digitalization process. For instance, digital restoration techniques, while invaluable in reviving artwork that has suffered from degradation or damage, can unintentionally alter crucial aspects such as

texture, color palettes, or fine details. These adjustments, although aimed at enhancing visual appeal or restoring perceived original states, might inadvertently reshape the artist's original vision or dilute the historical essence embedded in the piece. This raises a pertinent question: can we truly restore cultural artifacts without risking their detachment from the environment and era they originated in? Similarly, gamified representations of cultural traditions introduce a modern method of engagement, particularly attractive to younger audiences. By converting rituals, dances, or stories into interactive formats, these efforts make heritage more accessible and entertaining. However, the risk lies in oversimplification. Traditional practices often carry layers of symbolism, spirituality, and communal values that are integral to their identity. Trivializing such traditions into mere entertainment formats can strip them of their cultural depth, leaving an audience with a superficial understanding of the heritage. To navigate these challenges, it is essential to adopt holistic approaches that prioritize both innovation and fidelity. Technologies such as machine learning, artificial intelligence, and augmented reality offer possibilities for creating high-fidelity digital representations that respect the nuances of the original works. For example, advanced algorithms can analyze artwork details to ensure restoration preserves the true essence rather than imposing modern interpretations. Interactive digital experiences can be designed to incorporate storytelling elements and contextual narratives, bridging the gap between entertainment and cultural significance.

Collaboration is equally critical. Engaging cultural experts, historians, community leaders, and the custodians of these traditions in the process ensures that digitization respects and amplifies the essence of heritage, rather than diminishing it. Co-creation allows digital projects to reflect the authenticity rooted in the perspectives of those most connected to the heritage being preserved. Ethical frameworks should guide these collaborations, fostering inclusivity, shared ownership, and mutual respect. By taking such measures, the potential of digital technologies can be harnessed to complement—not replace—the original spirit and meaning of cultural heritage. In doing so, the digital transformation becomes a celebration of heritage, enabling broader accessibility while reinforcing its authenticity. Ultimately, this balance defines how cultural works can thrive in a digital landscape without sacrificing the depth and richness of their origins.

2. Towards a Digital Transition That Respects Authenticity

To address these challenges, effective methodologies must be developed that respect cultural specificities while leveraging technological advancements. Key strategies include:

- Actively involving local communities in digitization projects to ensure cultural accuracy and legitimacy.
- Providing detailed metadata to contextualize digitized heritage elements, preserving their historical and cultural significance.
- Establishing ethical guidelines to prevent the distortion or misappropriation of cultural traditions.

Navigating the digital transition requires a careful balance between preserving cultural roots and adapting to modern technological demands. By integrating local expertise and developing context-sensitive technologies, digital tools can serve

as powerful allies in protecting and celebrating cultural heritage in all its richness and integrity.

2.1. Strategies for Effective and Balanced Preservation

In response to the growing challenges of heritage conservation, innovative and inclusive strategies are essential to balance the imperatives of preservation with cultural and technological dynamics. This section examines sustainable approaches aimed at protecting resources while enhancing local identities.

2.1.1. *Training African Experts to Manage Digital Heritage*

The training of African experts in digital heritage transcends the mere acquisition of technical skills, evolving into a transformative strategy to establish cultural cyber-sovereignty. This concept represents an empowered framework wherein modern technologies are harmonized with the depth of local knowledge systems, creating pathways for culturally sensitive digital preservation. The integration of traditional knowledge, such as the oral historiography of griots, with cutting-edge digital archiving techniques enables these experts to serve as mediators—bridging the past and future while safeguarding the authenticity of cultural narratives. A key aspect of this approach is the embedding of ethical metadata within digital archives. This ensures not only the accurate representation of heritage but also the inclusion of culturally significant details, such as ownership, historical context, and symbolic meanings, which are often overlooked in conventional digital systems. Ethical metadata provides a scaffold for protecting heritage from misappropriation and promotes the responsible use and interpretation of digitized works. Innovative initiatives like the Fab Lab Patrimonial in Lomé are leading the charge in this domain. By incorporating local customs and cultural taboos into technolog-

ical workflows, these labs ensure that heritage preservation aligns with the societal norms and values of the communities involved. For example, the adherence to sacred protocols when digitizing ceremonial artifacts demonstrates how technology can respect and reflect cultural sensibilities. Furthermore, these labs serve as collaborative hubs where technologists, community leaders, and cultural custodians co-create solutions tailored to the unique realities of African societies. This model of digital heritage governance exemplifies inclusivity and adaptability. It envisions a future where African expertise drives the global discourse on heritage preservation, challenging the dominance of external systems and fostering regional technological autonomy. The strategic focus on localized systems, such as secure local servers and decentralized frameworks, mitigates reliance on Western technological infrastructures. This, in turn, empowers African nations to assert greater control over their digital resources, ensuring that heritage remains accessible, protected, and governed by those it belongs to. Moreover, these efforts redefine the role of technology in heritage preservation. Rather than acting as a neutral tool, technology becomes a dynamic participant in cultural continuity—capable of extending the vibrancy and meaning of traditions to future generations. By training experts as stewards of both technology and culture, this paradigm advances the notion that digital preservation is not merely about storage but about fostering relationships between people, heritage, and technology. As Africa continues to harness these innovative approaches, the continent is poised to lead a global shift towards inclusive and culturally respectful models of heritage governance. Such advancements not only preserve the richness of African traditions but also strengthen cultural identities in the digital age, ensuring that heritage remains a living, evolving force rather than a static relic of history.

2.1.2. Heritage Diplomacy: Navigating Authenticity in a Globalized World

In an era characterized by dynamic cultural exchanges, heritage diplomacy stands as an essential mechanism for safeguarding the integrity of historical narratives. This approach delves into the delicate interplay between preserving cultural identity and addressing the demands of global interconnectedness, offering a strategic pathway to reconcile these often competing priorities.

2.1.3. Emerging Actors and Alliances

Within the framework of emerging actors and alliances, diasporas are playing an increasingly influential role in reshaping cultural restitution efforts. By utilizing digital platforms as instruments of advocacy and mobilization, they bridge geographic divides and amplify conversations about the return and preservation of cultural heritage. Diasporic collectives, such as Open Restitution Africa, demonstrate how social media can serve as a powerful tool to raise awareness, foster public dialogue, and exert pressure on institutions holding African cultural artifacts. Through targeted campaigns and educational content, these groups are reclaiming narratives and challenging long-standing imbalances in cultural ownership. In parallel, South-South collaborations are redefining traditional approaches to heritage conservation. Initiatives such as the SAVAMA-DCI project in Mali exemplify innovative methods for ensuring the protection and accessibility of cultural archives. By leveraging secure local servers for the storage and dissemination of West African manuscripts, this project reduces dependence on Western cloud infrastructures and strengthens technological autonomy. The emphasis on localized solutions

not only safeguards heritage but also empowers regional actors in the digitalization process, fostering greater ownership and resilience in cultural preservation strategies. These efforts highlight a shift in the dynamics of cultural and technological cooperation. Unlike historical models dominated by Northern institutions, the emergence of diasporic advocacy and South-South collaboration signals a movement toward equitable partnerships rooted in mutual respect and shared goals. This transformation acknowledges the agency of African communities and diasporas in shaping their own heritage narratives while redefining global standards for restitution and preservation. Furthermore, the intersection of digital platforms and heritage advocacy opens new avenues for cross-cultural dialogue and solidarity. The diasporas' engagement often extends beyond restitution, serving as catalysts for broader discussions on identity, history, and postcolonial legacies. Their actions promote not only the return of artifacts but also the restoration of dignity and the reimagining of African contributions within global cultural discourses. By integrating advanced digital tools and emphasizing collaborative frameworks, these initiatives reflect a profound evolution in the philosophy and practice of cultural restitution. They challenge the historical status quo while embracing innovative models of engagement that prioritize inclusivity, technological empowerment, and cultural integrity. Ultimately, diasporas and South-South collaborations are reshaping the preservation landscape, offering transformative solutions for the protection of heritage and the representation of African identities on the global stage.

2.2. Establishing Hybrid "Heritage Hubs" Rooted Locally but Interconnected Globally

Hybrid "heritage hubs" redefine the preservation and transmission of cultural identities by blending local traditions with

modern technological innovations, creating a fertile ground for global interconnection. These hubs represent a pioneering model that combines the physical presence of cultural artifacts and practices with the virtual reach of digital networks, serving as both custodians of heritage and agents of international dialogue. Anchored in culturally rich local contexts, such as the Lagos Heritage Hub, these spaces are designed to serve as multifaceted platforms that go beyond conventional museums or cultural centers. They function as living ecosystems where traditional knowledge, oral histories, and artistic practices converge with cutting-edge digital technologies like augmented reality (AR) and virtual reality (VR). By doing so, these hubs provide immersive, interactive experiences that enable communities to engage with their heritage in innovative ways while reaching broader, global audiences. An essential characteristic of these hubs is their adaptability to the unique socio-cultural dynamics of their host communities. For example, they integrate traditional governance systems and cultural protocols, ensuring that heritage is represented authentically and ethically. This integration allows for the preservation of intangible cultural elements—such as the performative nuances of oral storytelling or the communal aspects of traditional rituals—that might otherwise be lost in a purely digital format. By blending physical and digital infrastructures, these hubs establish a dialogue between the tangible and the intangible, creating a holistic approach to cultural preservation. On an international scale, hybrid heritage hubs act as nodes of cultural diplomacy. By connecting local communities with global networks, they foster intercultural collaboration and mutual understanding. For instance, through virtual exhibitions or livestreamed cultural performances, they make it possible for distant audiences to experience and appreciate the richness of

local cultures without geographic barriers. At the same time, these hubs provide opportunities for reciprocal learning, as communities engage with global audiences, exchanging ideas and building partnerships that respect cultural diversity and promote inclusivity. Innovative governance models further enhance the impact of these hubs. By incorporating decentralized and community-led frameworks, they empower local actors to take ownership of the preservation and dissemination of their heritage. This participatory approach ensures that cultural representations are accurate and free from external distortions, fostering a sense of pride and agency within communities. Technologically, these hubs leverage tools such as blockchain for provenance tracking and secure digital archives, ensuring that artifacts and knowledge remain protected from misappropriation. Additionally, AI-driven metadata systems can enrich the cultural context of digitized assets, making them more accessible and informative to diverse audiences. Ultimately, hybrid heritage hubs embody a transformative vision for the future of cultural preservation and exchange. By harmonizing local grounding with global connectivity, they not only safeguard heritage but also reimagine its role in fostering a more interconnected, empathetic world. These hubs signify a shift toward a collaborative, inclusive, and technologically empowered model of cultural heritage governance.

2.3. The Involvement of Foreign Investors in African Cultural Exploitation

The involvement of foreign investors in African cultural exploitation acquires groundbreaking possibilities with the application of cutting-edge technological frameworks. Augmented reality (AR) offers a compelling method for contextualizing African artifacts by virtually embedding them within their authentic environments—such as historical sites, natural land-

scapes, or traditional ceremonial settings – during international exhibitions. This immersive technique transcends conventional showcase methods, transforming exhibitions into multisensory experiences that authentically narrate the origins and significance of the artifacts. By bridging physical and virtual realms, AR allows audiences to engage not only with the physical artifact but also with the cultural and environmental stories behind it. However, this innovative approach raises critical questions about control and authority in curating African heritage. Who determines the narrative embedded in these immersive representations, and how can African communities ensure that their perspectives and values remain central? AR, despite its immersive potential, risks perpetuating a form of neocolonialism if narratives are framed predominantly by external investors or institutions without proper collaboration with the originating communities. Such control over storytelling impacts not only the authenticity of representation but also the intellectual and cultural ownership of the heritage being displayed. In this light, the use of modern technologies in cultural preservation and representation necessitates a robust ethical framework. Foreign investors must collaborate closely with African communities, historians, and cultural experts to ensure that the integration of AR aligns with authentic narratives and respects the diverse dimensions of African heritage. Innovative governance structures could facilitate this process by ensuring transparent decision-making, equitable representation, and the rightful acknowledgment of cultural custodians. From a scientific perspective, AR-based cultural exhibitions could be further enhanced through interdisciplinary methodologies, combining cultural studies, anthropology, computer science, and environmental design. For example, algorithms could be developed to simulate cultural artifacts within dynamic ecosystems reflec-

tive of historical conditions, enriching both educational and experiential dimensions of the display. This dynamic interplay between technology and cultural authenticity highlights how foreign investment can transition from exploitation toward a collaborative approach that strengthens African voices, sustains cultural resilience, and engages global audiences in meaningful ways.

Conclusion

The integration of cutting-edge technologies, such as augmented reality (AR), alongside collaborative frameworks grounded in cultural justice is reshaping the global approach to showcasing Africa's rich heritage. These advancements do not merely enhance representation but redefine how history is experienced, understood, and preserved, moving beyond static exhibitions to dynamic and interactive encounters that bridge past and present. Augmented reality, in particular, offers transformative possibilities by creating immersive environments where artifacts are reconnected with their original historical, social, and cultural settings. Through AR, audiences are transported into the contexts that shaped these heritage items, enabling profound and authentic engagement with their stories. For instance, AR can allow viewers to experience an ancient African sculpture within its ceremonial space, accompanied by the traditional music, rituals, and vibrant expressions of the era. Such technologies transcend the limitations of physical displays, offering multisensory engagement that fosters deeper connections to the artifacts and cultures they represent. These practices also catalyze essential debates around the exploitation and mismanagement of cultural resources. By foregrounding issues of fairness and inclusivity, they encourage global stake-

holders—including museums, investors, and policymakers—to adopt equitable approaches to heritage management. The concept of cultural justice compels a reevaluation of traditional power dynamics, ensuring that African communities retain agency over their narratives and cultural assets. Collaborative partnerships between local custodians and international institutions become instrumental, fostering mutual respect and shared responsibility in the stewardship of heritage. Moreover, these initiatives challenge longstanding perceptions of African heritage as static or vulnerable, instead presenting it as dynamic and resilient. AR-enabled platforms allow younger generations, both within Africa and the diaspora, to engage with their heritage through interactive and accessible formats. By merging technology with tradition, heritage becomes a living resource for education, identity formation, and innovation. The implications extend to sustainable cultural management. Digital infrastructures enriched by AR offer not only preservation but also equitable access, ensuring that cultural treasures are safeguarded against geopolitical uncertainties and environmental threats. Furthermore, these technologies facilitate the creation of global cultural ecosystems where African heritage can inspire cross-cultural collaborations and knowledge-sharing. As these transformative approaches gain momentum, they open promising avenues for redefining representation and ownership within the heritage sector. By placing cultural justice and technological innovation at the forefront, Africa's historical, cultural, and artistic legacy is poised to thrive in an interconnected world, offering a powerful narrative of resilience, creativity, and equity that enriches the global stage.

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Training to Teach Writing in FFL (French as a Foreign Language): Between Didactic Theories, Field Practices, and Digital Tools

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Abstract

Teaching writing in French as a Foreign Language (FFL) represents a complex competency requiring linguistic, cognitive, and sociocultural knowledge. In a context shaped by evolving pedagogical practices and emerging digital technologies, teacher training in this specific area reveals several shortcomings, particularly a disconnect between theory and practice, along with often superficial integration of digital tools.

To address these challenges, this research proposes an integrative approach combining three complementary dimensions: theoretical foundations (communicative and action-oriented approaches, writing processes), field practices (observation, experimentation, reflective analysis), and critical use of digital tools (Google Docs, Padlet). The methodology incorporates document analysis, participant observations, semi-structured interviews, and the design of innovative training modules.

The findings highlight the need to develop teachers' reflective stance, metacognitive skills, and informed mastery of educational technologies. Confronted with contemporary challenges like artificial intelligence, multilingualism, and hybrid learning models, this multidimensional approach emerges as key to developing training programs adapted to current realities in FFL instruction.

Keywords: *Writing pedagogy, Teacher training, Integrative approach, Educational technology, Reflective practice*

Former à enseigner l'écrit en FLE : entre théories didactiques, pratiques de terrain et outils numériques

Résumé

L'enseignement de l'écrit en français langue étrangère (FLE) constitue une compétence complexe qui mobilise à la fois des savoirs linguistiques, cognitifs et socioculturels. Dans un contexte marqué par l'évolution des pratiques pédagogiques et l'émergence des technologies numériques, la formation des enseignants à cet enseignement spécifique présente plusieurs lacunes, notamment un cloisonnement entre théorie et pratique, ainsi qu'une intégration souvent superficielle des outils numériques.

Pour répondre à ces défis, cette recherche propose une approche intégrative articulant trois dimensions complémentaires : les fondements théoriques (approches communicative et actionnelle, processus d'écriture), les pratiques de terrain (observation, expérimentation, analyse réflexive) et l'utilisation critique des outils numériques (Google Docs, Padlet). La méthodologie combine analyse documentaire, observations participantes, entretiens semi-directifs et conception de modules innovants.

Les résultats mettent en évidence la nécessité de développer chez les enseignants une posture réflexive, des compétences métacognitives et une maîtrise raisonnée des technologies éducatives. Face aux nouveaux enjeux comme l'intelligence artificielle, le multilinguisme et l'hybridation des apprentissages, cette approche multidimensionnelle apparaît comme la clé d'une formation adaptée aux réalités contemporaines de l'enseignement du FLE.

Mots-clés : *Didactique de l'écrit, Formation enseignante, Approche intégrative, Numérique éducatif, Pratique réflexive.*

Introduction

Writing in French as a foreign language represents a fundamental skill, the mastery of which directly influences the academic and professional success of learners. As Dolz and Schneuwly (1998) have shown, this skill goes far beyond the strictly linguistic framework by simultaneously mobilizing cognitive and sociocultural dimensions. In the current context marked by the rapid evolution of writing practices under the influence of digital technologies, the question of teacher training for this specific teaching is of particular importance.

Notre recherche part d'un constat préoccupant : les dispositifs de formation existants présentent plusieurs insuffisances majeures. On observe notamment un cloisonnement excessif entre théorie et pratique, une intégration superficielle des outils numériques, ainsi qu'une discontinuité entre formation initiale et continue. Comme le souligne Bucheton (2009, p.112), la formation des enseignants ne peut se limiter à une simple transmission de méthodes, mais doit viser la construction d'une compétence professionnelle contextualisée, fondée sur l'analyse des pratiques, la réflexivité et l'intégration raisonnée du numérique.

Our study is based on two central hypotheses. First, an integrative approach combining theoretical reflection, analysis of practices, and experimentation with digital tools would better prepare teachers for contemporary challenges. Second, the development of metacognitive skills among trainers would promote better adaptation to the diverse needs of learners. These hypotheses lead us to pursue three main objectives: to establish a critical inventory of existing training programs, to identify key skills for effective teaching, and to propose a conceptual framework for more appropriate training programs.

To address these complex challenges, we have developed a rigorous qualitative methodology combining four complementary approaches. Documentary analysis of existing training programs will provide a detailed overview. Participant observations of training sessions, guided by a standardized analysis grid, will provide access to actual practices. A series of semi-structured interviews with various stakeholders (trainers, trainee teachers, experienced practitioners) will provide rich data on representations and needs. Finally, from an action research perspective, we will design and evaluate innovative training modules incorporating the principles of the integrative approach.

This multidimensional methodology has the advantage of combining different data sources and points of view, making it possible to grasp the complexity of the issue while maintaining a strong anchoring in the realities of the field. The complementarity of these approaches should make it possible not only to produce solid scientific knowledge, but also to formulate concrete operational recommendations for improving training practices. The articulation between theoretical reflection, field practice and reasoned integration of digital technology thus appears to be the key to more effective teacher training, better adapted to the contemporary challenges of teaching writing in FFL.

1. Teaching writing in FFL, a skill to be built

1.1. Theoretical approaches to teaching writing

The teaching of writing in French as a foreign language has undergone a profound transformation in recent decades, reflecting the evolution of pedagogical trends in language teaching. Initially focused on a normative and structuralist perspective, the pedagogy of writing emphasized the reproduction of textual models and the systematic correction of linguistic er-

rors. This traditional approach centered on form rather than meaning, considered writing essentially as a finished object to be produced according to predetermined standards.

As S. Plane and B. Schneuwly (2000, p. 78) rightly point out, this restrictive conception has gradually given way to more global approaches: «The teaching/learning of writing cannot be limited to training in textual production; it is a question of introducing learners into a culture of writing, by mobilizing linguistic, discursive and socio-cognitive knowledge». This paradigm shift has taken place in two major stages.

First, the advent of the communicative approach in the 1970s and 1980s redefined the aims of teaching writing. It was no longer seen as a simple linguistic coding activity, but as an authentic act of communication, involving constant adaptation to the context of enunciation and the characteristics of the recipient. Textual coherence, pragmatic relevance and the sociocultural dimension became essential parameters in the evaluation of written productions.

This development paved the way for the action-oriented approach, enshrined in the Common European Framework of Reference for Languages (CEFR). From this perspective, writing is seen as a genuine instrument of social action. Learners are no longer mere text producers, but social actors required to perform meaningful tasks: writing professional emails, publishing posts on social networks, completing administrative forms, etc. These activities, anchored in real or realistic situations, mobilize an integrated set of language, intercultural, and pragmatic skills.

Alongside these developments, didactics research has highlighted the process dimension of writing. The seminal work of Hayes and Flower (1980) showed that the act of writing is not reduced to a finished product, but constitutes a complex pro-

cess involving several interdependent phases: planning, textualisation, revision and rewriting. This conception has had major repercussions on teaching practices, leading to particular attention being paid to the learner's journey rather than just the final result. Teachers are now required to support each stage of the process, developing metacognitive strategies and a capacity for self-assessment in learners.

Finally, recent research in psycholinguistics and cognitive neuroscience has highlighted the complexity of the cognitive mechanisms involved in writing in a foreign language. This activity simultaneously mobilizes working memory, conceptual planning, attentional control, and the management of linguistic resources in the L2, making it one of the most demanding skills to acquire. For the teacher, this requires the ability to identify the specific difficulties of each learner and to offer differentiated remediation measures.

These various developments reflect the growing complexity of the field of writing teaching in FFL, which now incorporates linguistic, cognitive, social, and cultural dimensions. They imply a profound transformation of teaching practices and, consequently, of teacher training methods.

1.2. Specificities of FFL teacher training

Effectively training teachers to teach writing in FFL represents a complex challenge that requires a comprehensive approach to professional skills. As C. Puren (2006, p. 48) rightly points out, this training cannot be limited to the transmission of linguistic knowledge: «The competence to teach a language does not reside solely in mastery of the linguistic system, but in the ability to design, implement and evaluate learning devices adapted to contexts, audiences and objectives». This broader conception of teaching competence implies developing genuine didactic and pedagogical expertise among those trained.

Current institutional frameworks, such as the Council of Europe's Framework of Competences for Language Teachers and the CIEP Framework, effectively emphasize this professional dimension. They particularly emphasize the need to master a set of key skills:

- The ability to design teaching sequences adapted to different text genres.
- The ability to lead varied and motivating writing activities.
- Mastery of formative and summative assessment techniques.
- The flexibility required to adapt teaching to diverse contexts.

These skills must be acquired and perfected throughout a career, combining initial and continuing education. However, it is clear that the teaching of writing often remains the neglected subject of training curricula. Recent studies show that:

- In initial training, writing is frequently relegated to the background, in favor of oral skills, which are perceived as more urgent to develop.
- Continuing education programs tend to favor a technical approach, focusing on digital tools without always incorporating them into in-depth didactic thinking.

This problematic situation is compounded by a significant gap between institutional prescriptions and realities on the ground. The action-oriented approach, although theoretically sound, faces several obstacles in its implementation:

- Time constraints often incompatible with the lengthy processes required for writing.
- Assessment systems sometimes unsuited to new process-based approaches.

- Divergent cultural representations of what constitutes "good" written production.
- Resistance linked to deep-rooted pedagogical traditions.

These tensions reveal the need to fundamentally rethink training systems to better equip teachers to face the complex challenges of teaching writing in a FFL context. Truly effective training should help overcome these contradictions by developing teachers' ability to analyze and adapt to the diversity of teaching situations encountered.

1.3. Didactic and pedagogical issues linked to writing

The teaching of writing in French as a foreign language faces several persistent difficulties, well documented by didactics research. The first major challenge concerns the assessment of written productions, which raises complex questions. This fundamental tension is expressed in several concrete dilemmas: should we prioritize linguistic correctness or the richness of ideas? How should we weigh the quality of the final text and the efforts made during the writing process? These questions reveal the limitations of traditional assessment grids and call for more flexible approaches, combining summative and formative assessment, and adapted to the specificities of each learning context.

The issue of learner motivation represents a second major pitfall. For many students, especially those who struggle with writing in their mother tongue, writing in FFL can become a source of apprehension and discouragement. This phenomenon can be explained by several factors: the significant cognitive load required by writing in their second language, the feeling of vulnerability in the face of correction, and sometimes the perceived lack of relevance of the proposed tasks. To counter these difficulties, it appears essential to design authentic and motivating writing situations, connected to the learners' real

interests and needs. Activities such as collaborative writing, publishing texts, or corresponding with native speakers can thus contribute to strengthening student engagement.

Managing group heterogeneity is a third major challenge. In FFL classes, especially in university settings or language centers, teachers must deal with extremely diverse learner profiles: differences in language levels, learning objectives (academic, professional, or personal), cognitive styles, and attitudes toward writing. This diversity requires the ability to differentiate teaching approaches, for example by offering flexible instructions, personalized learning paths, or optional activities. Such pedagogical flexibility, however, requires solid didactic expertise and a good understanding of learning processes.

A final, often underestimated issue concerns the influence of learners' mother tongue. L1 can play an ambivalent role in the acquisition of writing in FFL: sometimes facilitating (through the transfer of similar writing strategies or rhetorical structures), sometimes hindering (through interference at the lexical, syntactic, or discursive level). Knowledge of the linguistic and cultural specificities of learners' L1 would allow teachers to anticipate certain difficulties and adapt their teaching approach. However, as several researchers regret, teacher training still gives too little space to contrastive linguistics and the consideration of multilingual repertoires in the teaching of writing.

These various challenges—assessment, motivation, differentiation, and the influence of L1—illustrate the complexity of teaching writing in FFL and the need to train teachers in these multiple dimensions. They also demonstrate that solutions cannot be straightforward, but must be adapted to specific teaching contexts and learners' particular profiles.

2. Practical training: between professional gestures and appropriation of procedures

Initial teacher training in teaching writing in French as a foreign language (FFL) cannot be achieved solely through the transmission of theoretical knowledge, which is nevertheless essential. Thus, M. Tardif, (2006, p. 5) stipulates that «the observation of classroom practices and the analysis of real-life or simulated situations allows future teachers to test their representations and to construct a professional judgment based on experience». By virtue of his statement, it is important to note the essential nature of professional training in a situation, combining theoretical knowledge and experience.

The practical anchoring of the training is based on three fundamental pillars. First, guided observation of teaching practices allows theoretical knowledge to be compared with the complexity of the field, to analyze professional gestures in their real context and to develop a critical view of different teaching postures. Second, active experimentation is based on professional scenarios, such as micro-teaching, simulations of problem situations or the analysis of concrete cases, in order to test teaching methods. Finally, the co-construction of knowledge involves individual and collective reflective feedback, exchanges between peers to develop shared solutions and collaborative work on concrete projects. This experiential approach aims to develop key skills in future teachers: the adaptation of interventions to the needs of learners, a reflective posture to evolve their practices and essential pedagogical flexibility in the face of the diversity of teaching contexts.

The training is anchored around three practical dimensions: guided observation (to analyze real-life practices), active experimentation (through role-playing), and the co-construction of knowledge (through collective reflection). This approach develops skills in adaptation, reflexivity, and pedagogical flexibil-

ity among preservice teachers. The challenge is significant: the goal is to train professionals capable not of mechanically applying pedagogical recipes, but rather of constructing responses adapted to the complex situations they will encounter in their daily practice. This training, through and for practice must, however, remain closely linked to theoretical contributions, in a fruitful dialectical dynamic where each dimension nourishes and challenges the other.

2.1. Observation and support of field practices

Access to the teaching profession in FFL begins with immersion in the reality of classrooms, a decisive step in developing practical skills. The systematic observation of authentic teaching situations serves as an essential lever for this training, allowing future teachers to test their theoretical knowledge against the realities of the field: confrontation of didactic models with their concrete application, understanding of the variability of contexts, and awareness of the gaps between institutional prescriptions and real practice. The analysis of sessions (live or via recordings) nourishes a professional culture by sharpening the eye on didactic choices (instructions, activities), teacher-learner interactions during writing, or even feedback strategies. To strengthen this approach, structured support is crucial: observation grids targeting specific skills (time management, differentiation), reflective logbooks, collective debriefings, or dialogues between observers and observed teachers. Framed in this way, this practice forges a “professional perspective” – the ability to decipher teaching situations in order to draw lessons from them – and lays the foundations for a reflective posture essential to the continuous evolution of practices throughout a career.

Professionalization in FFL stems from immersion in classrooms, where critical observation of real-life practices plays a central role. By confronting theories and realities (variety of contexts, institutional gaps), by analyzing teaching gestures and interactions, trainees develop expertise. Observation grids, reflective journals, and peer debates optimize this approach, building a lasting "professional perspective" and reflective stance.

2.2. Experimentation in training: workshops, micro-teaching and self-confrontation

The training of FFL teachers in the teaching of writing is structured around an action-based pedagogy, favoring concrete experimentation as a driving force for learning. This approach is divided into three complementary phases. First, didactic design workshops allow future teachers, through collaborative work, to master the development of complete teaching sequences, from the creation of writing activities adapted to different levels to the integration of the action-based approach in realistic scenarios, without forgetting the design of effective feedback systems. Next comes the micro-teaching phase, where trainees, in a secure environment, test facilitation techniques, experiment with various postures (guide, mediator, expert) and refine their time and interaction management, while benefiting from immediate formative feedback.

Systematic reflective analysis (individual and group debriefings, identification of strengths and areas for improvement, and theoretical perspective) helps transform experience into lasting skills. This alternation between design, practice, and reflection offers triple added value: contextualized appropriation of know-how, development of a critical reflective stance, and preparation for the complexity of the field. Thus, pre-service teachers gradually build their professional identity while ac-

quiring the essential tools to teach writing in FFL with agility and creativity.

The training in teaching writing in FFL relies on an active pedagogy combining three phases: collaborative design (sequences, activities, feedback), micro-teaching (experimentation of postures and techniques), and reflective analysis (debriefings, avenues for improvement). This cycle allows skills to be anchored in practice while cultivating reflexivity, which is essential for dealing with the complexity of classrooms.

2.3. Co-construction of pedagogical knowledge

The evolution of concepts in language teaching has profoundly redefined approaches to teacher training, as M. Gremmo (2011, p. 78) points out: «Training cannot be reduced to a transfer of knowledge, but must be built on a collaborative dynamic where exchange and critical reflection reinvent practices». This interactive paradigm is particularly relevant for the teaching of writing in FFL, the complexity of which requires a collective approach. Based on co-construction, this philosophy values the experiential and tacit knowledge of teachers, while favoring horizontal exchanges rather than a vertical transmission model.

Concretely, it takes the form of mechanisms such as communities of practice, pedagogical co-design workshops, and collective analysis of professional situations. These spaces allow for the confrontation of representations, the pooling of resources, and the development of solutions adapted to the challenges of the field, thus fostering a shared professional culture. Educational research attests to this: such collective intelligence generates contextualized innovations, transcends the limits of prescriptive approaches, and consolidates professional identity.

More than a method, this collaborative approach involves a metamorphosis of the profession—a transition from a position of performer to that of reflective practitioner, anchored in a learning community. Ultimately, it is through this synergy that FFL writing training becomes more effective, providing teachers with the tools to respond nimbly to the complexity of classrooms.

The collaborative model, the linchpin of modern FFL training (Gremmo, 2011), replaces vertical transmission with the co-construction of knowledge. Shared workshops, practice analyses, and peer exchanges foster innovation and reflexivity, transforming the teacher into an actor in a learning community—key to mastering the complex teaching of writing.

3. Digital technology as a lever for transformation in the teaching of writing

The integration of digital technology into the teaching/learning of French as a foreign language is no longer a simple technological trend, but a structural transformation of teaching practices. As F. Mangenot (2013, p. 112) points out: «Digital tools offer a multitude of possibilities for transforming teaching practices: they allow for the diversification of materials, the encouragement of collaboration, and the adaptation of teaching to the specific needs of learners.»

The teaching of writing, in particular, is profoundly affected by these developments: it is no longer just a matter of teaching how to write, but also where, for whom, with what tools and according to what digital methods. In this perspective, training teachers in the didactic, critical and creative use of digital tools is becoming a major challenge to ensure relevant training adapted to the current realities of teaching FFL.

3.1. Digital Tools for Training

The evolution of digital technologies has considerably enriched FFL teacher training programs, particularly in the area of writing instruction. These tools offer innovative pedagogical possibilities that are profoundly transforming training practices.

Collaborative platforms such as *Moodle*, *Google Docs*, and *Padlet* have revolutionized the approach to writing by enabling unprecedented interactions between instructors and learners. *Google Docs*, for example, facilitates real-time collaborative writing while offering precise commenting and change tracking features. This tool encourages a process-based approach to writing, where each stage of text production can be accompanied and commented on. Teachers-in-training thus learn to guide the writing process while developing their own ability to provide constructive feedback.

Padlet, meanwhile, introduces a visual and creative dimension to writing instruction. This platform allows for immediate and aesthetically pleasing publication of writing, thus fostering personal expression and learner motivation. Student teachers are discovering how to use these tools to diversify writing situations and adapt their teaching methods to different learner profiles.

These digital technologies offer several major advantages for teacher training. First, they allow for individualized progress monitoring, as each piece of writing can be annotated, corrected, and improved in a targeted manner. Second, they facilitate collaborative work, essential for developing shared professional skills. Finally, they offer opportunities for metacognitive reflection, as student teachers can retrospectively analyze the progress of their own writing or that of their peers.

Using these tools in training also prepares future teachers for the realities of contemporary FFL classrooms, where digital technology plays an increasingly important role. They learn to integrate these technologies effectively into their future teaching practices, while developing a critical eye for their uses. This dual skill - technical and reflective - now constitutes a key element of teaching professionalism in the field of teaching writing in foreign languages.

3.2. Developing a critical approach to digital technology in writing instruction

The proliferation of digital tools in FFL teaching requires in-depth teacher training that goes beyond mere technical mastery. As N. Ferry (2016, p. 23) aptly points out, «the use of digital technology in the classroom must go beyond the simple digitization of traditional tools. It is about encouraging critical reflection on technological uses, in order to avoid the excesses of automation and to foster ethical, creative, and collaborative digital education». This critical perspective is essential to ensure the relevant pedagogical integration of technology in writing instruction.

The pedagogical value of digital technology in FFL writing instruction is neither inherent nor automatic. While these tools undoubtedly offer transformative potential – enhancing learner engagement through gamified platforms like Kahoot! and enabling real-time collaboration via Google Docs – their misuse can inadvertently undermine the very learning outcomes they seek to promote. Research consistently demonstrates that without proper pedagogical framing, digital tools risk fostering what Selwyn (2020) terms "zombie pedagogies," where flashy interfaces mask shallow learning. Two particularly pernicious effects emerge: the **fetishization of technology** as an end in itself, and the **deskilling effect** of over-automation, where

grammar checkers and AI writing assistants short-circuit the cognitive struggle essential for writing development (Plane & Schneuwly, 2000).

This paradox necessitates a radical rethinking of teacher training programs. Beyond basic digital competency, FFL educators require **critical digital literacy**—the ability to interrogate technologies through multiple lenses:

- **Pedagogical soundness:** Can Padlet's virtual walls genuinely scaffold the writing process better than physical post-its, or does the medium distort the task?
- **Cognitive impact:** Does Grammarly's auto-correction enhance metalinguistic awareness, or create dependency?
- **Ethical dimensions:** How do algorithmically generated writing suggestions from tools like ChatGPT reinforce linguistic power structures?

Effective training must therefore cultivate teachers' capacity for **technology triage**—the systematic evaluation of tools against three criteria: alignment with writing theory (e.g., process vs. genre approaches), developmental appropriateness, and potential for fostering learner autonomy. For instance, while automated feedback systems may suit advanced learners refining nuance, beginners benefit more from tools like Etherpad that emphasize collaborative meaning-making.

Ultimately, the goal is to develop what Bucheton (2009) calls "**adaptive expertise**"—the ability to judiciously select, combine and sometimes reject technologies based on shifting classroom contexts. Only through such critical praxis can digital tools transcend their status as mere modernity signifiers and become genuine levers for writing development in FFL

3.3. Innovative Practices and Pedagogical Hybridization

The integration of digital technologies into the teaching of writing in French as a Foreign Language (FFL) has catalyzed a pedagogical revolution, fostering innovative practices that redefine traditional methodologies. By expanding the range of available materials, diversifying writing formats, and enabling dynamic learner interactions, these technological advancements have transformed writing instruction into a more engaging, collaborative, and socially embedded process. One of the most significant breakthroughs lies in **remote collaborative writing**, which allows learners to co-construct texts in real time, irrespective of geographical constraints. This practice not only enhances linguistic competence but also cultivates critical 21st-century skills, including collective meaning negotiation, peer feedback literacy, and adaptive writing strategies. Such interactions shift writing from a solitary exercise to a **dialogic and socially situated activity**, aligning with sociocultural theories of learning that emphasize knowledge co-construction (Vygotsky, 1978).

However, the effective implementation of these tools presents a **dual challenge** for FFL educators. Professionally, teachers must acquire new competencies to harness digital tools pedagogically, including designing scaffolded activities that leverage technology's affordances, facilitating collaborative writing dynamics, and mediating online interactions to ensure equitable participation. Didactically, they must strike a balance between innovation and pedagogical intentionality, ensuring technology serves clearly defined learning outcomes rather than driving instruction arbitrarily. Research underscores the risks of "**technology for technology's sake**" (Selwyn, 2020), advocating instead for a critical approach where digital tools amplify – rather than replace – proven writing pedagogies.

When thoughtfully integrated, digital technologies transcend mere modernization, enabling a **paradigm shift** in FFL writing

instruction. They promote learner autonomy through multi-modal writing tasks (e.g., blogs, podcasts, and hypertexts), foster intercultural exchanges via transnational collaborations, and provide data-driven feedback through learning analytics. Yet, their full potential hinges on **systematic teacher training** that emphasizes pedagogical design over technical proficiency alone. As argued by Mangenot (2013), the future of FFL writing lies in **hybrid models** that blend digital innovation with theoretical rigor, ensuring technology acts as a catalyst for deeper learning. Only then can it truly elevate writing proficiency in a globalized, digitally mediated world.

Conclusion

Teaching writing in French as a foreign language is now a complex and multidimensional field, requiring an integrative approach that combines three fundamental pillars: theoretical foundations, field practices, and the pedagogical integration of digital technology. As J. Jager (2019, p. 210) aptly observes, this articulation constitutes a real challenge: «Language teaching, and in particular writing, is a field where the articulation between theory and practice remains a constant challenge, especially since digital technology offers new perspectives without, however, erasing didactic fundamentals». This productive tension between these different dimensions appears to be at the heart of contemporary issues in teacher training.

Our analysis reveals that these three axes—theoretical, practical, and technological—enter into a complex dialectical relationship. On the one hand, they complement and enrich each other: theory illuminates practice, which in turn nourishes theoretical reflection, while digital technology offers new tools for

this interaction. On the other hand, as we have observed, tensions can emerge when these dimensions are not properly articulated. The action-oriented approach, for example, while theoretically sound, often runs up against the constraints of real-world educational contexts. Similarly, digital technologies, if not integrated wisely, risk becoming educational gadgets rather than genuine levers for learning.

Given this observation, we advocate for a three-dimensional training model that:

- Is firmly anchored in the contributions of research in language and text teaching
- Promotes reflective experimentation through concrete approaches such as micro-teaching or action research
- Integrates digital technology in a critical and creative manner as a tool for learning

This model is particularly relevant in the face of the emerging challenges described by N. Selwyn (2020, p. 45): «The rise of technology, coupled with artificial intelligence, is redefining the role of the teacher and transforming the very nature of teacher training. Pedagogy must evolve in response to these challenges to prepare learners and trainers for a constantly changing world». Three major challenges in particular emerge: the rational integration of generative AI into writing processes, the pedagogical management of the growing multilingualism of learners, and adaptation to new hybrid teaching-learning methods.

Ultimately, training in teaching writing in FFL can no longer be considered an accessory skill. On the contrary, it represents a central element for language education adapted to the needs of the 21st century - an education that must reconcile theoretical rigor, practical grounding, and technological innovation. Only under this condition will we be able to train teachers capable of effectively supporting learners in the develop-

ment of writing skills that are at once solid, creative, and truly operational in various social and professional contexts.

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Proverbe et education en pays kroumen (Tabou)

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Résumé

L'analyse des proverbes en pays kroumen met en lumière leur rôle essentiel dans le processus éducatif au sein de ces communautés. Les expressions traditionnelles, riches en sagesse, transmettent des valeurs culturelles et des leçons de vie, servant ainsi de fondement à l'éducation morale et sociale des jeunes. Les proverbes, souvent utilisés dans les échanges intergénérationnels, favorisent la réflexion critique et encouragent les jeunes à s'interroger sur leur identité et leur place dans la société. Ils permettent également de renforcer les liens communautaires en instillant des principes de respect, de solidarité et de responsabilité. Ces proverbes ne sont donc pas seulement des outils de transmission de connaissances, mais ils sont aussi des vecteurs d'unité et de continuité culturelle. Leur intégration dans l'éducation formelle et informelle est cruciale pour préserver le patrimoine immatériel des kroumen et pour préparer les futures générations à relever les défis contemporains tout en restant ancrées dans leurs traditions.

Mots clés : Actualité, Éducation, Kroumen, Proverbe, Société, Tradition.

Proverbs and education in kroumen country (Tabou)

Abstract

The analysis of proverbs in kroumen country highlights their essential role in the educational process within these communities. These traditional expressions, rich in wisdom, convey cultural values and life lessons, thus serving as the foundation for the moral and social education of the youth. Proverbs, often used in intergenerational exchanges, promote critical thinking and encourage young people to question their identity and place in society. They also help strengthen community bonds by instilling principles of respect, solidarity, and responsibility. Thus, these proverbs are not only tools for transmitting knowledge, but they are also vectors of unity and cultural continuity. Their integration into both formal and informal education is crucial for preserving the intangible heritage of the kroumen and for preparing future generations to face contemporary challenges while remaining rooted in their traditions.

Key words: *Actuality, Education, Kroumen, Proverbs, Society, Traditional.*

Introduction

La littérature négro-africaine recouvre un ensemble de productions littéraires, à la fois écrites et orales. Cette littérature, riche et dynamique, continue d'évoluer en reflétant le vécu, les espoirs et les défis des peuples noirs. Toutefois, celle qui suscite notre intérêt dans le cadre de cette analyse est la littérature orale. Longtemps ignorée par les occidentaux à cause de son caractère oral, celle-ci a fini par gagner en reconnaissance internationale grâce à de nombreux travaux de recherche faits aussi bien par des européens que par des africains.

La littérature orale africaine est un puissant moyen qui permet de conserver et de diffuser la culture traditionnelle à travers la parole. C'est en cela que S.-Ma. Eno Belinga la définit comme, « d'une part, l'usage esthétique du langage non écrit et, d'autre part l'ensemble de connaissances et les activités qui s'y rapportent » (S.-M. Eno Belinga, 1967, p.7). Selon P. Ziguï Koléa, elle « représente aujourd'hui, pour tout Africain conscient de son passé fabuleux, un document vivant qui lui permet de comprendre les signes de ses origines et commander l'orientation de son futur. » (J.Y. Kouadio, 2006, p.7). En effet, elle a été pour les africains d'hier et, est pour ceux d'aujourd'hui et de demain le témoignage vivant de la vie des Noirs, de leur expérience et de leur vision du monde.

De ces points de vue, nous pouvons comprendre que la littérature traditionnelle est un vaste domaine dont la valeur repose sur les genres qui la composent et la rendent vivante et active. Elle est donc appréhendée comme un héritage appartenant à des peuples sans écriture, transmise de bouche à oreille à travers les âges. Elle est également un élément fondamental dans la définition de l'identité de ceux-ci.

Parler donc de littérature traditionnelle, dans la société africaine, en général, et en Côte d'Ivoire, en particulier, c'est faire référence aux genres qui la composent. Ces genres sont, entre autres, le conte, le chant, le mythe, l'épopée, la légende, le proverbe. Nous avons cependant choisi le proverbe comme objet de notre réflexion.

En pays kroumen, en particulier, ce genre oral fait partie des arts verbaux qui figurent en tête de proue. En effet, après avoir longtemps observé ce genre littéraire, nous nous sommes aperçus qu'il remplit plusieurs fonctions et que, pour le peuple kroumen, le proverbe est un véritable moyen de communication et par ailleurs un excellent outil d'éducation. Cette façon d'employer, au quotidien le proverbe a aiguisé notre curiosité sur l'intérêt du proverbe dans la vie courante de la société du Sud-ouest de la Côte d'Ivoire.

Pour aborder cette étude, il est impératif de recourir à des méthodes d'analyse appropriées à ce sujet. Pour ce faire, deux méthodologies de l'analyse des textes littéraires, jugé aptes à mener cette étude ont été convoquées. Il s'agit de la sociocritique et de la stylistique. Le choix de ces deux méthodes est motivé par le fait que : la sociocritique, selon C. Duchet, insiste sur le texte dans son essence, en le présentant comme le lieu où se joue et s'effectue une certaine socialité. Elle s'attarde sur l'univers social présent dans le texte. La stylistique quant à elle, nous aidera à examiner les artifices stylistiques que revêtent les proverbes du corpus, à saisir toute la charge émotionnelle exprimée par leurs émetteurs. Elle nous conduira donc au décodage du corpus.

L'objectif visé par la présente étude est d'examiner le rôle du proverbe dans l'éducation kroumen. Nous avons donc bien voulu décomposer la problématique du sujet en trois interrogations, lesquelles sont : Qu'est-ce-que c'est que le proverbe ?

Comment le kroumen l’appréhende-t-il ? Quel rôle joue le proverbe dans l’éducation kroumen ?

Dans le but de bien mener la réflexion, l’étude s’articulera en trois principaux axes. Dans le premier nous présenterons le peuple kroumen et définirons les concepts clé. Le deuxième axe consistera à présenter notre matériau d’étude, puis à l’analyser. Et le troisième axe examinera l’enjeu éducatif, la portée idéologique des proverbes du corpus, ainsi que leur impact sur la société moderne kroumen.

1. Présentation du peuple kroumen et définition des termes fondamentaux

Ce point se décline en la présentation du peuple kroumen, puis l’approche définitionnelle des termes clés.

1.1. Présentation du peuple kroumen

Nous avons choisi de mettre un point d’honneur sur cette présentation, car nous pensons que la connaissance du peuple étudié permettra de mieux appréhender les contours de l’analyse. Pendant notre enquête sur le peuple krou, nous avons retenu qu’il est, bien sûr, tout à fait arbitraire de dissocier krou du Liberia et krou de la Côte d’Ivoire, mais dans le cadre de cette étude seuls ceux de la Côte d’Ivoire en général, et les kroumen en particulier, retiendront notre attention.

La présentation du peuple kroumen est donc une invitation à connaître son histoire, son espace géographique et l’ensemble des activités que mène cette communauté ivoirienne. Il appartient, en effet, au grand groupe ethnique KROU qui se compose des wè, des Bété, des Dida, des Godié, des Bakwé, des Neyo et des Kroumen.

Les kroumen se trouvent dans le sud-ouest de la Côte d’Ivoire, sur le littoral ivoirien. Ils occupent les départements

de San Pedro, Grand-Bereby, Tabou, Sassandra et Grabo. D'un département à un autre, il existe des variantes, d'où la question des tribus. C'est ce qui justifie une diversité de prononciation selon les tribus. Leur peuplement en Côte d'Ivoire, relève d'une histoire riche et complexe, reflétant des dynamiques migratoires, sociales et culturelles. En effet, au fil des siècles, les kroumen ont migré vers le sud-ouest ivoirien, soit en fuyant des conflits, soit en cherchant de nouvelles terres agricoles. Leur migration a été influencée par des mouvements de populations dans la région. Ils se sont donc établis précisément dans le Bas-Sassandra, une région riche en ressources naturelles, qui favorise leur développement économique. Vivant dans des zones côtières et forestières, avec un accès sur la mer, le mode de vie du peuple kroumen est majoritairement dominé par la pêche, l'agriculture ainsi que le commerce. Ils sont organisés en villages, avec des structures sociales et culturelles bien définies.

1.2. Définition des termes fondamentaux

Dans la mesure qu'aucune étude ne peut être menée sur le proverbe, sans une connaissance préalable et une maîtrise des caractéristiques fondamentales de ce genre, la définition de celui-ci s'avère donc nécessaire pour mieux le cerner. Après quoi, une définition du thème « éducation » sera donnée.

1.2.1. *Le proverbe*

Il s'agira de situer l'origine du proverbe, puis de le définir. Selon G. Calame-Griaule (J.Y. Kouadio, 2006, p.55), le proverbe s'origine dans les temps immémoriaux. En remontant plus loin dans le temps, l'on se rend bien compte que le proverbe existait bien longtemps avant notre civilisation (africaine). En effet, le philosophe Socrate (470-399 avant Jésus-Christ), il définissait le proverbe comme « des manières de dire courtes et mémorables » (A. Rey, 1984, p.X). Aristote (384-322 avant Jésus-

Christ), pour sa part, définit le proverbe en le rapportant à la maxime (A. Rey, 1984, op.cit.).

Cependant, bien que tous soient unanime sur le fait que le proverbe s'origine dans les temps révolus, sa définition, quant à elle, a toujours posé un véritable problème. Ainsi, qu'on soit tributaire d'une civilisation d'écriture ou d'une civilisation orale, la conception que l'on se fait du proverbe varie d'un peuple à un autre, tant le proverbe se présente comme une réalité complexe à définir

Alors, Le Dictionnaire de la langue française, encyclopédie, noms propres, donne la définition suivante au proverbe : « Formule figée, en général métaphorique, exprimant une vérité d'expérience, un conseil connu de tout un groupe social » (J.Y. Kouadio, 2006, p.57).

Le Dictionnaire Universel en donne la définition suivante :

Maxime ou sentence courte fondée sur l'expression à valeur didactique, elliptique et imagée dans laquelle s'exprime une sagesse populaire. L'origine orale détermine sa forme familière et rythmée (binaire), son allure archaïque (absence d'articles, d'antécédents), répétitive, procédant par allitération, assonances, similitudes et métaphorique. (Dictionnaire Universel des Littératures, 1994, p. 1508).

Y. J. Kouadio, pour avoir mené des recherches sur les proverbes en pays baoulé, retient que selon ce peuple, le proverbe est « un énoncé succinct, une parole d'expérience et de sagesse populaire dont on fait usage dans les règlements des litiges, lorsqu'on veut corriger, donner des conseils ou exprimer une pensée », (J.Y. Kouadio, 2006, p.51).

P. Zigui Kolea, pour définir les proverbes dit :

(...). Ils « s'écoulent de la parole », de la parole qui chante, de la parole qui pleure, de la parole qui félicite ; bref, de la conversation courante et surtout des

longues discussions entre adversaires, des simples querelles ménagères, toutes les fois où l'argument personnel devient insuffisant, (J.Y. Kouadio, 2006, p.7).

Pour P. Diarra, le proverbe est :

une vérité d'expérience, ou un conseil de sagesse pratique et populaire commun à tout un groupe social, (...) formule elliptique généralement imagée et figurée ; il appartient à la sagesse des nations et, quand il intervient dans le discours, il ramène l'émetteur ou l'auditeur au bon sens, à la logique, la raison et, au-delà du raisonnement, à la sagesse et à la quête du bonheur. (2002, p.12).

R. Colin, quant à lui, définit le proverbe en le comparant aux abeilles ; il dit :

Les proverbes (...). Je les compare volontiers aux abeilles : petite parole ronde qui vole dans nos conversations, portant le nectar des fleurs pour le transformer en miel, cette sagesse. Le proverbe construit la sagesse, à petites touches, aussi régulièrement que les alvéoles des ruches. (1965, p.105).

Le proverbe est donc une parole pleine de saveurs dont seuls les hommes honnêtes et sages se nourrissent constamment. C'est d'ailleurs ce que pense Colin, lorsqu'il affirme : « Si le mythe ne surgit qu'aux grands carrefours, si le conte fleurit facilement à chaque clair de lune, le proverbe, lui, est installé en permanence dans la bouche de l'honnête homme », (*Idem*, p.50). Selon lui, cette parole que l'on peut énoncer à tout moment et en toute circonstance, renferme un ensemble de sciences complètes, capable de faire pénétrer tout individu dans le vaste champ de connaissances et symboles traditionnels, par la pédagogie sociale. Toujours pour Colin, le proverbe joue un rôle majeur au sein d'une communauté dans la mesure où il « répond à la nécessité d'indiquer des références à l'ordre établi,

(...) le proverbe vient nous éclairer sur des mécanismes mal connus de la pensée négro-africaine », (*Ibid*, p.105, 107).

Pour les kroumen, le proverbe « *talè-do* » est une parole de sagesse que nous pouvons définir, de façon littérale comme « *voir seulement* ». Cela dit, le proverbe est, pour eux une observation des situations vécues dans la vie de tous les jours. Dans la conception de cette communauté, les paroles proverbiales sont des expressions traditionnelles qui véhiculent des sagesse, des valeurs et des leçons de vie. Considérées comme le fruit de l'expérience collective de leurs ancêtres, ces expressions de sagesse ne sont autre que des condensés des observations sur la vie, la nature humaine et leurs relations sociales. Elles sont le reflet de leurs croyances, de leurs coutumes et de leurs traditions, profondément enracinées dans leur histoire et leur mode de vie. Aussi, elles leur permettent de transmettre la sagesse et à renforcer les liens sociaux au sein de leur communauté.

Au vu de ces définitions, nous nous rendons bien compte que ne recouvre pas partout les mêmes réalités. Toutefois, ce genre oral se distingue des autres par sa concision son rythme, ses symboles, ses images et la norme qu'il contient. Que pouvons-nous dire de l'éducation ?

1.2.2. L'éducation

Bien de définitions ont été données sur l'éducation, mais celle qui rencontre notre assentiment est celle que donne André GIDE. L'éducation est, selon A. Gide,

l'art de former une personne, spécialement un enfant ou un adolescent, en développant ses qualités physiques, intellectuelles et morales, de façon à lui permettre d'affronter sa vie personnelle et sociale avec une personnalité suffisamment épanouie, (1923, p.776).

R. Cousinet, définit l'éducation comme « un ensemble de réactions de l'élève à certaines excitations du milieu (humain et non humain), réactions utiles à son développement » (1954, p.263).

L'éducation, en effet, est un processus à travers lesquels l'individu (stimulé) acquiert des connaissances, des compétences et des valeurs pour faciliter son insertion dans le tissu social. Et, dans la communauté kroumen, comme dans toutes les communautés traditionnelles humaines, ce processus relève de la compétence de tout le groupe. Ainsi, le peuple kroumen détient cet « art » de transmettre une éducation à ses enfants, car celle-ci a toujours joué un rôle indéniable dans l'intégration sociale de l'individu. A présent, nous présenterons le corpus d'étude.

2. Présentation et examen du corpus

La totalité des proverbes qui composent le corpus de ce travail est un ensemble de proverbes que nous avons recueillis sur le terrain, en pays kroumen. Cette partie du travail consiste, dans un premier temps, à présenter le corpus de notre analyse et dans un second temps, à faire l'examen des proverbes qui le composent.

2.1. Présentation du corpus

Le matériau sur lequel se fonde cette étude est un ensemble de dix (10) proverbes que nous avons collectés en pays kroumen, particulièrement chez les kroumen de Tabou.

Pour cette présentation, il sera question de faire la transcription de chaque énoncé proverbial. Celle-ci sera suivie de la traduction littérale (ou mot à mot), puis de la traduction littéraire. Enfin, nous présenterons le contexte d'emploi des proverbes. Ce qui permettra de les comprendre dans leur sens premier.

wliju nɔnə nədə nəʔkɔ ɓɔpomo raləle ndo mo
 ndionɔ
 / chevreau / dit / si tu n'as personne / pour te lancer / c'est toi-
 même /
 raləle po
 / qui le fait /

« Le chevreau dit : « si tu n'as personne pour te bercer, c'est à toi seul de le faire. »

Contexte d'emploi : Ce proverbe nous a été dit par notre père, lorsqu'un jour, je lui demandai pourquoi il ne pouvait pas trouver un répétiteur pour moi, alors que j'étais en classe de CM2. Papa m'a répondu en énonçant ce proverbe pour me dire qu'il n'avait pas les moyens pour payer un répétiteur et que je devais étudier seul afin de réussir mon entrée en 6^{ème}.

inǎɔ hɔ pie wa a gbjein bɛ wole pena djumo blɛʃe bɔ
 xelɛ wise
 / celui / qui / veut / son pied / propre / matin / doit / les laver / le
 soir /

« Lorsque tu veux avoir les pieds propres au réveil, il faut les laver le soir au coucher. »,

Contexte d'emploi : Dans une famille où un homme se plaignait toujours du fait que ses enfants lui étaient désobéissants. Pour attirer son attention sur le fait qu'il n'a pas été rigoureux dès le bas âge de ses enfants et que c'est cela qui explique le mauvais comportement de ces derniers, le chef de famille cita ce proverbe. Pour dire si tu veux que tes enfants te soient obéissants plus tard, il faut un peu plus de sérieux dans leur éducation dès l'enfance.

gblaɣuble nɔne popɾɛ lapɔ popɾɛ warɔ
 / Caméléon / dit / lenteur tue homme / lenteur / sauve homme /

« Le caméléon dit : « aller vite c'est bon, mais aller surement c'est encore mieux. »,

Contexte d'emploi : Nous étions en période des travaux champêtres au village, lorsque le fils aîné de la famille voulu épouser la fille du vieux kouya qui était retourné au campement pour les travaux. Le fils, décidé que son désir se réalise, demanda à son père de se rendre dans le campement du vieux kouya, afin de demander la main de la fille de celui-ci. Le père pour attirer l'attention de son fils aîné qui tenait absolument à réaliser son vœu, lui cita ce proverbe. Une manière de dire à l'enfant qu'en pareil moment, toute négociation en vue d'un mariage serait vouée à l'échec. Car, tous les villageois sont préoccupés par les travaux des champs. Il faudrait attendre à la fin de ces travaux.

gblaꞤuble nɔne nseke seke ndi bie kene jɛ
/ Caméléon / dit / remuer/remué / tu / vas / rattraper/ tes amis /

« Le caméléon dit : « tu as beau été lent, tu rattraperas tes amis. »,

Contexte d'emploi : Ce proverbe s'inscrit dans le même contexte que le précédent, (le proverbe N°3), à la différence, celui-ci demande de ne pas se presser dans tout ce l'on entreprend. Il faut aller à son rythme, sans toutefois se comparer aux autres.

nao ɔle tchike wlɛ ɔle wlɛ gbaklɛke
/ clui / qui / au / champ / dure / dure / au grenier /

« Celui qui dure au champ, durera dans le grenier. »,

Contexte d'emploi : En 2009, après notre réussite au Baccalauréat, nous avons dit à notre père que nous voudrions mettre fin à nos études et chercher à travailler. Papa nous énonce ce proverbe en disant ceci : si tu veux être très heureux plus tard, il faut continuer tes études mon fils. Car, si tu prends plus de

temps à étudier, tu obtiendras de gros diplômes et tu pourrais avoir un bon salaire.

ne dewɛ nie ke atɛ ne tchale nbe ɔ mɔɔ
/ tu / n'as pas l'eau / traversé / tu moque pas / ton ami / se noie /

On ne se moque pas de celui qui se noie, lorsqu'on n'est pas encore traversé la rivière. »,

Contexte d'emploi : Deux enfants étaient mis à l'épreuve, lorsque le premier était soumis aux questions, il semblait ne pas comprendre les questions qui lui étaient posées. Quant au second, au lieu qu'il se concentre en attendant son tour, il s'est plutôt mis à rire de son camarade qui avait du mal à s'en sortir. L'interrogateur ayant remarqué l'attitude du second enfant, lui cita le proverbe, une manière de lui dire qu'il n'échapperait pas lui aussi à l'épreuve, qu'il n'en valait pas la peine de se moquer, car, il ne savait quel sort l'attendrait.

tokuo none ɔji na djɔ kɔtɛ ɔde na wɔ kɔtɛ
/ Escargot / dit / on / connaît / mon / malheur / pas / mon / bonheur /

« L'escargot noir dit ceci : « On connaît mon malheur, mais on ignore ma chance. »,

Contexte d'emploi : Un homme et son fils allaient délimiter la portion qui devait servir de champ pour la nouvelle saison. Soudain, l'enfant vit un escargot noir sur une branche d'arbre. Il posa la question à son père de savoir pourquoi un escargot est pêché sur la branche de l'arbre, pour l'enfant, la couleur noir traduit le malheur, l'obscurité. Il s'est dit tout de suite que le champ ne leur apporterait pas une bonne récolte. Grande était sa surprise lorsqu'à la fin de travaux, la récolte fut abondante. C'est ainsi que son père lui cite ce proverbe. En toute règle, il y'a des exceptions. Il ne pas se fier à l'apparence pour

juger. La couleur noire de cet escargot ne traduit pas forcément le malheur.

ápɛ gba nɔne nemɔ dɛ mɛã kɔbo bla bɔ
/ poule dit / tu veux / avaler une chose / soulève / patte /

« La poule dit : « lorsque tu veux avaler ta proie, tu plies la patte. »,

Contexte d'emploi : Le proverbe N°8 a été entendu pour la première fois, lorsque la deuxième épouse du chef du village de Blidouba¹, qui, portant sur sa tête du bois de chauffe, pour montrer son courage à sa coépouse, manqua d'adresse, et sa charge lui tomba sur le pied. Ce qui lui a provoqué une blessure. Pour attirer son attention sur le manque de prudence, son mari lui cita ce proverbe.

nãɔ ɔ nene pe kɔkɔ a hɔnɔ ɔnɔ kɔ nɔ ɛ ʊru mle
/ homme / qui / n'a pas / lion / peur / c'est / lui / qui / joue / avec / lui, /

« C'est celui qui ne craint pas le lion qui se permet de jouer avec lui. »,

Contexte d'emploi : Dans une famille où tous les petits enfants ont peur de leur grand-père sous prétexte que celui-ci est un sorcier. Lorsque un jour, l'un des petits fils vint demander à son père s'il était possible de rendre une visite au grand père afin de recevoir de sages conseils, c'est en ce moment que le père cita ce proverbe à son fils, pour lui dire que, si tu ne crains pas ce que les autres disent de ton grand-père, et que tu l'approches, alors, tu recevras de sages conseils de la part de ce dernier.

¹ Blidouba est un gros village de la sous-préfecture d'Olodio, dans le Département de Tabou

ju bɔ ne ɕɔwa nena je ɔɔ ne ɕapɛ pini ne
tɔtɔklɛ

/ enfant / veut / pas / marcher / dit / qu'il / y'a / déchets / poulets / sur /
sol /

« Lorsqu'un enfant refuse de marcher, il trouve qu'il y'a les déchets de poulets au sol. »

Contexte d'emploi : Ce proverbe nous a été cité par notre père, qui lorsque nous jouions les paresseux au champ, refusant de travailler convenablement, sous prétexte que nous étions un élève et que notre seul domaine d'activité était l'école. Papa a réfléchi et a cité ce proverbe pour nous dire ceci, c'est parce que nous ne voulions pas travailler que nous trouvions ce prétexte. Après la présentation du corpus, un examen de ceux-ci sera fait.

2.2. Examen du corpus

Une classification des proverbes sera faite en fonction de leur type, puis l'analyse des thèmes suivra.

2.2.1. Classification des proverbes du corpus

Classer les proverbes du corpus revient à faire une étude typologique de ces proverbes. Ainsi, nous avons trois groupes types de proverbes, à savoir les proverbes de constatation, les proverbes logiques et les proverbes moraux. Une numérotation est attribuée à chaque proverbe, selon l'ordre d'apparition dans la présentation du corpus.

▪ Les proverbes de constatation

Dans cette classe, les énoncés suivants sont rangés:

N°1- « Le chevreau dit : « si tu n'as personne pour te bercer, c'est à toi seul de le faire ».

N°5- « Celui qui dure au champ, durera dans le grenier ».

N°7- *« L'escargot noir dit ceci : « On connaît mon malheur, mais on ignore mon bonheur ».*

N°9- *« C'est celui qui ne craint pas le lion qui se permet de jouer avec lui ».*

▪ Les proverbes logiques

Dans notre corpus, les énoncés qui peuvent être rangés dans la classe des proverbes logiques sont les suivants :

N°2- *« Lorsque tu veux avoir les pieds propres au réveil, il faut les laver le soir au coucher ».*

N°5- *« Celui qui dure au champ, durera dans le grenier ».*

▪ Les proverbes moraux

Pour ce qui est des proverbes du type moral, nous avons les énoncés qui suivent :

N°1- *« Le chevreau dit : « si tu n'as personne pour te bercer, c'est à toi seul de le faire ».*

N°2- *« Lorsque tu veux avoir les pieds propres au réveil, il faut les laver le soir au coucher ».*

N°3- *« Le caméléon dit : « aller vite c'est bon, mais aller surement c'est encore mieux ».*

N°4- *« Le caméléon dit : « tu as beau été lent, tu rattraperas tes amis. »*

N°6- *« On ne se moque pas de celui qui se noie, lorsqu'on n'est pas encore traversé la rivière ».*

N°7- *« L'escargot noir dit ceci : « On connaît mon malheur, mais on ignore mon bonheur ».*

N°8- *« La poule dit : « lorsque tu veux avaler ta proie, tu plies la patte ».*

N°9- *« C'est celui qui ne craint pas le lion qui se permet de jouer avec lui ».*

N°10- *« Lorsqu'un enfant refuse de marcher, il trouve qu'il y'a les déchets de poulets au sol ».*

2.2.2. *Analyse des thèmes*

Cette étape vise à présenter les différents thèmes que développent les énoncés du corpus. Ces thèmes sont entre autres :

Le courage et persévérance : les proverbes n° 1-3-4-5 et 9 ;

La prudence : pour ce thème, voici les énoncés du corpus qui le développent : proverbes n° 2-3-5 et 8 ;

L'empathie : l'énoncé n°6 ;

.....: l'énoncé n°7 ;

Nous avons également le thème de **la paresse**. Ce thème est porté par un seul proverbe du corpus. Il s'agit de l'énoncé n°10.

3. La portée éducative des proverbes du corpus

Dans cette partie nous nous évertuerons à créer le lien entre les proverbes et l'éducation en pays kroumen. D'abord nous plancherons, sur la place et le rôle que joue le proverbe chez les Kroumen de Tabou. Ensuite, nous montrerons comment l'éducation est perçue, par ces derniers à travers leurs proverbes ; la portée idéologique de ces proverbes. Enfin nous parlerons de l'impact des proverbes dans leur société d'origine, ainsi que les défis auxquels ceux-ci sont confronté dans la nouvelle société.

3.1. Place et rôle du proverbe dans la société kroumen

La parémie occupe une place centrale et multifonctionnelle dans la communauté kroumen. Elle est un vecteur indéniable de la culture kroumen, permettant de transmettre des valeurs, des croyances et des pratiques ancestrales de génération en génération. Au sein de cette communauté, le proverbe renforce le sentiment d'appartenance à une identité culturelle commune en rappelant aux membres leur racine et leur histoire. Aussi permet-elle à l'individu d'accéder à une certaine noblesse dans la société. Car toujours présente dans le verbe de l'homme sage, la

parémie enrichit son langage et son mode de communication, dans la mesure où, elle lui permet d'exprimer des idées complexes de manière concise et percutante. Le proverbe n°9, « *C'est celui qui ne craint pas le lion qui se permet de jouer avec lui* », contribue donc à donner cette noblesse sociale. Réunis sous l'arbre à palabre, pour le règlement d'un conflit, par exemple, les proverbes servent de référence pour apaiser les tensions et rappeler les valeurs de paix et de réconciliation à l'ensemble des membres. Ils donnent des conseils pratiques à l'individu, sur la façon dont il doit gérer les relations interpersonnelles et les défis du quotidien.

Également, à l'occasion d'un conclave portant sur la survie du groupe, l'énonciation du proverbe, en situation solennelle, apporte une certaine profondeur et une sagesse aux échanges. Car, « donner le sens d'un proverbe revient à révéler son « secret » qui est la vérité qu'il renferme ; c'est extraire ou débusquer le substrat qui donne sa quintessence. Or, cela ne se fait pas sans effort intellectuel » (J.Y. Kouadio, 2008, p.63).

En outre, pour symboliser des moments importants de la vie kroumen, comme les mariages, les naissances ou encore les funérailles, les paroles proverbiales peuvent être employées pour renforcer leur signification et leur impact dans la vie communautaire. Au plus jeunes, les proverbes véhiculent des valeurs morales et éthiques, nécessaires à leur intégration dans la communauté, en leur offrant des repères sur le comportement qu'il convient d'adopter pour la bonne marche du groupe.

Il ressort de ce qui a été dit plus haut que les proverbes sont essentiels à la vie sociale, culturelle et éducative des Kroumen. Ils participent à la construction de l'identité collective, facilite l'éducation et la socialisation, et jouent un rôle crucial dans la communication et la résolution des conflits. Leur présence dans la société kroumen est le témoignage de la richesse et de la profondeur de leur culture.

3.2. Les proverbes dans l'éducation et la transmission des savoirs

Dans les sociétés de civilisations orales, en général, et celle des kroumen, en particulier, les proverbes sont perçus comme bien plus que de simples expressions vides de sens et d'essence. Ils sont un puissant outil éducatif, qui, sculpte la mentalité quelque peu hirsute de l'individu, transmet des valeurs humaines et sociales, et contribue à renforcer l'harmonie du groupe.

Pour les kroumen de Tabou, particulièrement, les proverbes représentent des vecteurs de connaissances et des expériences traditionnelles. Ils véhiculent des leçons de vie transmises d'âge en âge. Un proverbe, par exemple, peut résumer une expérience collective, offrant ainsi des conseils pratiques sur la façon de se comporter face des situations courantes. C'est le cas des proverbes n°3 « *Le caméléon dit : « aller vite c'est bon, mais aller surement c'est encore mieux* » ; n°4 « *Le caméléon dit : « tu as beau été lent, tu rattraperas tes amis.* » et n°5 « *Celui qui dure au champ, durera dans le grenier* ». Cette transmission de savoirs permet aux jeunes gens de bénéficier de l'expérience des aînés ; ce qui du reste, les aide à naviguer dans la complexité de la vie quotidienne.

Ces paroles de sagesse, sont un véritable outil pédagogique et didactique pour l'éducation morale et éthique des membres de la société kroumen. Ils enseignent des valeurs comme le respect, la solidarité, l'honnêteté, la responsabilité, entre autres. En intériorisant ces valeurs et en les appliquant, les membres du groupe participent à la cohésion sociale et au bien-être collectif. Ce qui d'ailleurs ne fait que renforcer les liens sociaux, renforçant de ce fait, le sentiment d'appartenance à une expérience commune, ainsi que, le sentiment de solidarité. En tant qu'instrument servant à la pédagogie de l'individu, les pro-

verbes sont souvent énoncés pour illustrer des concepts et des idées, rendant ainsi l'apprentissage plus accessible et engageant. Leur structure rythmique et brève facilite la mémorisation, permettant aux jeunes d'intégrer facilement et allègrement les vérités véhiculées. Aussi, la chaîne proverbiale encourage l'esprit critique, face aux défis rencontrés. Elle invite, en effet, l'individu à analyser des situations quelque fois énigmatiques et à penser par lui-même. La signification d'un proverbe peut varier en fonction du contexte, ce qui stimule les discussions et les échanges d'idées au sein de la société.

3.3. La portée idéologique du proverbe kroumen

Dans cette partie il sera question d'établir le lien entre le peuple kroumen et les proverbes que celui-ci utilise pour véhiculer son message. En effet, les proverbes apparaissent quotidiennement dans la communication des Kroumen en général, mais plus particulièrement, ceux de Tabou.

Grâce à la sociocritique, on se rend compte que les proverbes sont calqués sur le tissu social de la culture du peuple qui les utilise dans sa communication. De ce fait, les réalités que traduisent ceux-ci sont toujours en relation avec leurs cultures traditionnelles. L'on peut observer le plus souvent des proverbes en fin de récit lorsque celui-ci veut donner un conseil. C'est dans cette veine d'idées que nous avons orienté notre regard afin de mettre en relief la spécificité d'apprentissage de chacun de ces énoncés proverbiaux.

Ces proverbes sont ceux que l'on utilise régulièrement dans la vie, en général. Et le peuple kroumen, en fait usage, tous les jours. Il les emploie pour illustrer un point de vue ou apporter une précision sur une argumentation. C'est précisément de cette manière que les sages les utilisent, afin d'aller à bout de leurs pensées. Sachant que la parole est incommensurable à la

pensée, c'est donc le proverbe qui joue le rôle d'un pont qui relie les deux rives.

C'est bien pour cela que Kourouma affirme que le proverbe joue le rôle du « cheval de la parole, quand la parole se perd, c'est grâce au proverbe qu'on la retrouve » (A. Kourouma, 1998, p.41). L'une des particularités du proverbe est qu'il se distingue pour la précision qu'il apporte comme « des proverbes de constatation ». Les émetteurs de ces proverbes se servent de ce court instant pour tourner en dérision le comportement des individus. Cependant, quel est l'impact de ces proverbes sur la communauté kroumen ?

3.4. Impact et défis du proverbe dans l'actuelle société kroumen

Tout comme dans la société traditionnelle, les proverbes ont encore un impact significatif dans la nouvelle société kroumen, marquée désormais par des changements majeurs et des influences extérieures. En effet, malgré ces transformations, les proverbes continuent d'être des vecteurs de la sagesse ancestrale. Car, ils encapsulent des leçons de vie qui ont été éprouvées par le temps. Par exemple les proverbes n° 1 « *Le chevreau dit : « si tu n'as personne pour te bercer, c'est à toi seul de le faire » ; n°3 « Le caméléon dit : « aller vite c'est bon, mais aller surement c'est encore mieux » ; n°4 « Le caméléon dit : « tu as beau été lent, tu rattraperas tes amis. » ; n°5 « Celui qui dure au champ, durera dans le grenier » et 9 « C'est celui qui ne craint pas le lion qui se permet de jouer avec lui », incitent les individus à être courageux et persévérants.*

Aussi, ces proverbes servent encore à consolider la cohésion, la solidarité, à veiller au maintien de l'équilibre social et, à faciliter l'apprentissage et la compréhension des normes admises dans la société des kroumen, surtout dans un contexte où les

valeurs traditionnelles sont parfois mises à l'épreuve par des forces vives extérieures. En outre, devant des décisions à prendre ou des choix à opérer, les expressions proverbiales impactent fortement l'esprit critique des kroumen, lorsque celles-ci les poussent à analyser leurs actions et à considérer les conséquences de leurs choix. Les proverbes n° 2 - « *Lorsque tu veux avoir les pieds propres au réveil, il faut les laver le soir au coucher* » ; n°3 « *Le caméléon dit : « aller vite c'est bon, mais aller surement c'est encore mieux* » ; N°5 « *Celui qui dure au champ, durera dans le grenier* » et n°8 « *La poule dit : « lorsque tu veux avaler ta proie, tu plies la patte* », nous en donne une pleine mesure.

Enfin, dans un environnement de plus en plus homogène, ces paroles de sagesse, permettent de préserver la langue et les traditions kroumen. Autrement dit, elles contribuent à la valorisation de l'identité et de l'héritage culturel de cette communauté.

Ces valeurs sont plus qu'essentielles dans une société en pleine mutation et, où les jeunes doivent naviguer à travers des défis complexes. Les proverbes regorgent de valeurs capables encore d'aider les jeunes à s'enraciner dans leur culture tout en leur finissant des repères moraux.

Cependant, en dépit de ces influences marquantes du proverbe sur la société kroumen d'hier et d'aujourd'hui, nous ne pouvons nier que celui-ci se heurte, de nos jours, à de nombreux défis, qui, si l'on n'y prend garde, pourraient altérer sa survie. Nous pouvons citer l'influence des technologies modernes, des cultures étrangères, des mass médias, qui, constituent de nouveaux canaux d'éducation, la domination de la langue française dans les zones rurales, ce qui entrainerait la perte de la langue vernaculaire et par ricochet, la perte des proverbes. Aussi, le mépris des jeunes pour cet art oral, au profit de nouvelles formes de formation que ces derniers trouvent moins contraignants et rudes.

Malgré ces défis que posent la modernisation et la mondialisation, le rôle des proverbes reste crucial dans la vie quotidienne de ce peuple. Il est donc essentiel que des efforts soient faits dans le but de promouvoir, de préserver et de revitaliser ces trésors de sagesse, qui sont les leurs. Et garantir que les générations futures continuent d'en bénéficier.

Conclusion

L'étude a porté sur le sujet « Proverbe et Éducation en pays kroumen (Tabou) ». L'objectif a été d'examiner la place que les kroumen accordent au proverbe, dans leur société, et le rôle qu'il y joue, relativement à l'éducation de l'individu et du groupe social. Il ressort de celle-ci que les proverbes ont une part importante dans l'éducation de ce peuple ; ils y jouent un rôle fondamental . Et la portée éducative des proverbes, a démontré que ces expressions succinctes et mémorables sont toujours d'actualité. Ce fait, les rend donc capables d'assurer, aujourd'hui encore, la transmission des valeurs culturelles et morales, tout en permettant l'ancrage des individus dans leur identité culturelle. Elle a, en sus, prouvé que les proverbes sont également dignes d'enseigner aux jeunes générations des valeurs morales telles que la sagesse, le respect, la solidarité et la responsabilité. De même, il a été révélé que les proverbes encouragent la réflexion critique et le dialogue intergénérationnel, qui, du reste, permettraient aux jeunes de connaître et d'intégrer les leçons de vie quotidienne.

Dès lors, la richesse de ces proverbes kroumen, révélée à travers cette étude, constitue un véritable patrimoine immatériel qui mérite d'être préservé et valorisé.

Face aux défis de la modernité, il est plus qu'urgent pour la communauté de Tabou de veiller à la pérennisation des proverbes, plutôt que de les saper, au profit de nouveaux canaux d'éducation.

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Organisational resilience within an organisation - An analytical view-

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Abstract:

Slataneya Belkacem emphasises the importance of humanising interactions with individuals in the workplace, stating: "Listen to the individual, understand their feelings, encourage their aspirations, appreciate their efforts, provide them with information and news, train and guide them, treat them as an individual with unique characteristics and features, and always be in touch with them and respect them". These incentives have the capacity to enhance the performance of individual employees, particularly in the context of social change within the organisation and the necessity for organisational creativity, which has become an imperative imposed by the rules of the global economic system.

The new global system is characterised by changes and transformations that require balancing the continuity of organisations and considering the requirements of development, pressures, and internal and external challenges affecting their survival and growth. Consequently, business organisations can rely on organizational agili-

ty with its concepts and objectives to achieve proactive preparedness and rapid response to changes in their environment. It is important to note that agility is a strategy adopted by organisations as an entry point for responding to continuous change.

Keywords: Agility, Organisational Agility, Organisational Creativity

La résilience organisationnelle au sein d'une organisation - Un point de vue analytique -

Résumé :

Slataneya Belkacem souligne l'importance d'humaniser les interactions avec les individus sur le lieu de travail : « Ces incitations ont la capacité d'améliorer les performances des employés individuels, en particulier dans le contexte du changement social au sein de l'organisation et de la nécessité d'une créativité organisationnelle, qui est devenue un impératif imposé par les règles du système économique mondial.

Le nouveau système mondial se caractérise par des changements et des transformations qui exigent de trouver un équilibre entre la continuité des organisations et la prise en compte des exigences de développement, des prés-sures et des défis internes et externes affectant leur survie et leur croissance. Par conséquent, les organisations commerciales peuvent s'appuyer sur l'agilité organisationnelle, avec ses concepts et ses objectifs, pour parvenir à une préparation proactive et à une réponse rapide aux changements qui surviennent dans leur environnement. Il est important de noter que l'agilité est une stratégie adoptée par les organisations comme point d'entrée pour répondre au changement continu.

Mots-clés : Agilité, agilité organisationnelle, créativité organisationnelle

Introduction

It is an irrefutable fact that contemporary organisations are navigating challenges and aspirations, as well as experiencing upward hopes and tensions, which places them under the influence of a series of variables. These variables revolve around the impact and influence of the aforementioned factors, leaving results that affect the essence of organisational life. These are pathways that bear implications for behaviours, whether at the operational level of employees or at the level of senior administrative leadership. These challenges, which are faced by the majority of institutions, irrespective of their public or private status, have rendered it obligatory for the latter to adhere to modern administrative models. Organizational agility has been identified as a mechanism for addressing the deteriorating reality of institutions. In the context of intensified competition and rapid change, it has been shown to facilitate the sustained growth of institutions through a set of procedures that lead to the achievement of goals.

In the context of abandoning old methods, it is imperative that procedures are considered essential and must encompass all aspects that enhance organisational agility within the institution, including agility in practice, expediency in decision-making and implementation, prompt response, and the empowerment of employees. A work environment characterised by acceptance, satisfaction, respect, pride, and consideration of the organisation as a desirable place has been shown to contribute to the full engagement of individuals in their jobs. This is particularly evident in instances where organisational support is provided to employees, enabling them to confront challenges, capitalise on opportunities, and perpetually enhance

their performance to achieve comprehensive efficiency and effectiveness.

The process of participation in decision-making is one of the mechanisms that enhance organisational flexibility and thus increase organisational effectiveness. Participation has been demonstrated to engender a sense of value and importance among members, facilitate acceptance of change processes, enhance performance efficiency, and augment productivity.

The current research paper aims to identify the importance of organisational agility as one of the mechanisms or tools to enhance employees' job performance and organisational effectiveness. The discussion will conclude with a consideration of organisational agility within the Algerian institution through its management stages.

1. Conceptual Elaboration of Organisational Agility and Organisational Creativity:

1.1. Organisational Flexibility:

A review of the historical development of the term "organisational agility" shows that it has replaced the term "nimbleness". Organisational agility has been discussed extensively in the management literature. In this context, we present researchers' perspectives on the term "organisational agility".

Organizational agility has been defined as:

The capacity of organisations to respond to internal and external challenges, necessitating the maintenance of pace with information systems and technology, investment in knowledge, integration of processes to match competing organisations, collaboration both internally and externally, and achievement of comprehensive supply chains. As stated by **Rafil Saeed Andrews** (2017, p. 110).

This high-level ability has the capacity to enhance performance over a relatively extended period by effectively respond-

ing to customer requests. As stated by **Rafil Saeed Andraws** (2017, p. 110).

This approach is predicated on the utilisation of knowledge management as a means of identifying opportunities in a dynamic environment. The organisation's ability to thrive in a dynamic environment is not merely a matter of adapting to external changes; rather, it is a capacity to identify and capitalise on emerging opportunities, a feat made possible by its efficiency and innovative spirit. Consequently, the organisation has secured a distinctive position within its field, a feat made possible by its ability to anticipate and address the evolving needs of its customers. As stated by **Shafaa Muhammad Ali Al-Azzawi** and **Inas Nahid Kamil Al-Dabbagh** (2019, p. 167).

The capacity of an organisation to accomplish its objectives is contingent upon the cultivation and augmentation of its resources, a process which concomitantly engenders organisational growth and endows it with agility in a rapidly evolving environment. As stated by **Muhammad Anwar Rashdi Hania** (2016, p. 10),

A strategy adopted by an organisation to navigate environmental changes and achieve goals is regarded as a "proactive strategy". The concept of organisational agility is predicated on the satisfaction of fundamental needs, including survival, continuity, and the avoidance of decline. The capacity for nimbleness is contingent upon the establishment of a fundamental criterion, namely the speed of response (**Esmahan Bloom**, 2019, p425).

1.2. Organisational creativity:

This concept has been addressed on the basis of the ability to sense the existence of an issue that needs to be addressed, and then the ability to think differently and creatively and then find

the appropriate solution. As stated by **Ghani Al-Zubaidi et al.** (2015, p. 407).

2. Dimensions of Organizational Agility:

Park (2019) identified three dimensions of organisational agility that enable organisations to sense and respond to opportunities and threats in a timely manner:

2.1. Sensorial Agility:

The capacity of an organisation to discern and comprehend opportunities within its environment is contingent upon its aptitude to identify capabilities that are conducive to its functioning. These capabilities encompass the interpretation of information, the provision of relevant data, and the alignment of capabilities with the organisation's ability to discern, interpret, and analyse change. This encompasses not only the sensing of current changes but also the anticipation of future changes.

2.2. Decision-Making Agility:

Herbert Simon (1957) propounded the notion that decisions are the foundation of management, and that management is essentially decision-making. Consequently, it is imperative for teams to make considered and informed decisions collectively, as opposed to relying on individual decisions, to ensure a more balanced response.

2.3. Practice Agility:

The concept of Agility is one which encompasses the utilisation of resources, the refinement of processes, and the integration of novel innovations. **Eisenhardt and Martin** (2000) posit that it consists of a set of activities that reconstitute organisational resources and modify business processes based on the

principles of decision-making to address changes in the surrounding environment.

3. Determinants of Building a Culture of Organisational Resilience 'Towards Greater Abstraction and Inclusivity:

3.1. Participation in Decision-Making:

The act of engaging in the process of decision-making can be regarded as a hallmark of progress, given that it is employed by a considerable number of workers to address issues related to policies or production. This collaborative approach to problem-solving within the workplace has been shown to enhance morale. Participation fosters an inclination towards collaboration and the sharing of resources among individuals, thereby enhancing the efficacy of the group as a whole. This phenomenon contributes to the psychological well-being of workers. The role of these individuals extends beyond mere submission and obedience to the directives issued by management. Instead, they fulfil a positive function that contributes to the development of effective work systems and procedures. The utilisation of the participation method in management facilitates the cultivation of human relations and fosters a sense of organisational belonging. This, in turn, engenders a commitment among individuals to the organisational goals, given their involvement in their formulation. The efficacy of participation in management is contingent on the active involvement of the workforce within the organisation. As asserted by **Belkacem Sultania** (2015, p. 94).

The ongoing commitment to fostering and amplifying employee participation mechanisms within organisational frameworks is substantiated by the evident advantages and benefits inherent in such processes. The involvement of subordinates is a fundamental principle for the success of any organisation in

achieving its objectives, as all contemporary management theories emphasise the significance of participation in all phases of work, from the formulation of policies and the development of plans to the implementation, evaluation and assessment stages (**Noureddine Haroush**: 2016, p. 223). A substantial body of research has demonstrated that employee participation is a pivotal method of employee motivation. The impetus for participation on the part of the individual is rooted in a desire to engage with decisions that impact their personal interests, access to information and experiential knowledge, recognition of their status and role within the organisational structure, the reinforcement of their sense of organisational belonging and pride, and the fulfilment derived from the perception of autonomy and mastery in their work (**Khalil Mohammed Hassan Al-Shamag, Khudair Kadhim Hamoud**, 2007, p. 289).

The ongoing commitment to fostering and amplifying employee participation processes is substantiated by the evident advantages and benefits of such engagement. (**Sayed Mohammed Jab al-Rab**: 2008, pp. 73-74).

- It is imperative to achieve enhanced profitability and provide adequate support for wage and reward systems for employees.
- The purpose of this exercise is to obtain feedback, suggestions and creative ideas.
- The contribution of the individual is pivotal in the resolution of issues and the promotion of democratic decision-making processes.
- The establishment of a cadre of employees who are suitably qualified to assume supervisory roles in the future is imperative.
- It is imperative to achieve elevated levels of employee satisfaction and commitment.

The integration of workers into decision-making processes within organisations is a pivotal aspect of representation on the board of directors or supervisory boards. The presence of a representative on the board of directors ensures that the necessary information on labour issues is provided, and that there is an opportunity to present labour issues and problems at the highest level of the organisation. The participating supervisor employs the carrot approach, engaging in discussions with relevant individuals and incorporating subordinates into the decision-making process. This approach eschews a confrontational spirit between workers, relying instead on the acceptance of subordinates by the supervisor rather than on the authority granted to the latter. It is noteworthy that the efficacy of such a supervisory approach is predicated on its capacity to valorise the efforts of workers by involving them in organisational affairs and addressing their concerns, thereby fostering an esprit de corps and initiative in their professional endeavours. (Ghani dahan Mitnai Al-Zubaidi et al: 2015, p. 313).

3.2. Occupational exhaustion:

The provision of meaningful, purposeful, and important work to employees is one of the ways in which an organisation can promote organisational agility. Job absorption is defined as the opportunity to complete meaningful tasks and specific duties within the framework of the extent to which workers feel absorbed in their work. (Ghani Daham Al-Zubaidi: 2015, p. 372) The variable of job security plays a significant role in the development of job absorption. In environments where workers experience acceptance and satisfaction, characterised by appreciation, respect, pride and a sense of fulfilment, individuals become fully absorbed in their jobs. This ultimately leads to enhanced performance and a positive perception of the organi-

sation as a desirable place. As asserted by **Abd El- Hamid Abd El-Fattah Al-Maghraby** (2007, p. 351), job absorption denotes the extent to which an individual is integrated with their job and perceives its significance. Consequently, it is associated with both the mental and emotional domains. Job absorption is influenced by numerous stimuli, including the emotional aspect. Its positive effects on the individual are evident, manifesting in feelings of happiness, satisfaction, and elevated self-esteem. Conversely, as the level of immersion diminishes, the adverse effects on the individual's emotions, including anxiety, distress, and a sense of despair, are observed. Within this paradigm, immersion signifies the magnitude of the psychological linkage between the individual and their occupation, thereby ensuring that their profession assumes a pivotal role in their life and self-esteem. As stated by **Abd El- Hamid Abd El-Fattah Al-Maghraby** (2007, p. 348).

The interaction between job absorption and job commitment engenders organisational commitment in the individual, who, in turn, is keen to develop the organisation and its processes, and values the work. This commitment entails the restructuring of systems of rewards and material incentives, which allow workers to obtain the appropriate return for their effort and thought. It also contributes to providing a stable career for workers. The present endeavour is focused on the development of human relations, with the objective of identifying the prevailing conditions of human activity. In this regard, contemporary approaches, including organisational justice, citizenship and organisational trust, are being utilised as inputs, with a view to accentuating the (**Abd El- Hamid Abd El-Fattah Al-Maghraby**). 2007, pp. 354-355)

3.3. Empowering workers:

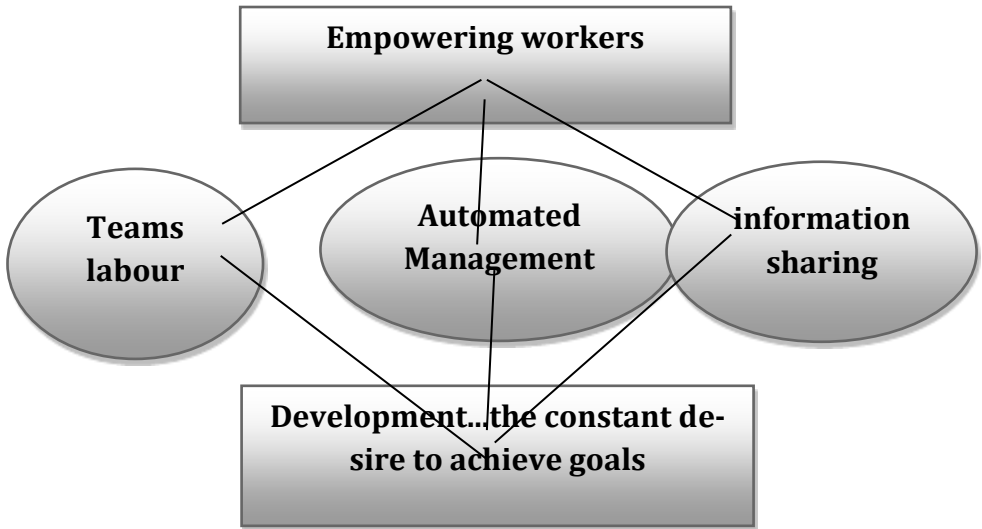
As **Roosevelt** (n.d.) asserts, "**A person who achieves success is not a genius; he is a person who possesses only ordinary qualities... but he has developed them to a higher degree than ordinary.**"

Recent developments have precipitated a marked modernisation and development in the management of organisations, consequent to the forces of environmental change that have been at play in recent times. It is evident that contemporary organisational development should encompass more than merely technological advancements and the facilitation of communication; it must also extend to the realms of human resources and organisational processes. Among the pivotal processes that facilitate such development is the empowerment of individuals, which is instrumental in nurturing human resources and instilling organisational agility. The importance of employee empowerment as a key factor in team success is well-documented. This assertion underscores the significance of unleashing the untapped potential of employees and providing them with leadership support to foster innovation. In this context, employees are recognised as a valuable asset that should be nurtured and developed within the organisation. (**Mohamed Jamal Abou Al-Majd**: 2008, pp. 41-47).

The empowerment process is a multifaceted concept that is implemented at the level of the individual's place of employment. It involves the transfer of authority and decision-making powers to the individual, empowering them to make decisions related to their work. This process is accompanied by the provision of the necessary resources and support to ensure the effective execution of tasks. As stated by **Raad Abd El-H. Al-Taie and Issa Qadaa** in 2008, p. 237, empowering workers is a strategic and significant tool for organisations. It plays a crucial

role in the development of human resources within the organisation, particularly in administrative and technical domains. Furthermore, it serves as a strategic approach for organisations to navigate both current and future changes. A significant number of organisations have adopted this strategy, underpinned by the transfer of power from superiors to subordinates. This development signifies a departure from the behavioural patterns exhibited by superiors in the past, and organisations have commenced the transfer of power to work teams, entrusting them with the authority to make decisions pertaining to their activities. Empowering workers (i.e. providing them with support) entails more than merely granting them a degree of autonomy and enabling them to determine the manner in which the objectives established by the leadership team are to be accomplished. It signifies the distribution of the information and expertise necessary for achieving the objectives of the organisation. The crux of this issue lies in the dissemination of information from experts, a practice that contrasts with the conventional approach of withholding this information and maintaining its confidentiality. In this context, it can be anticipated that those in positions of authority will be more inclined to support their subordinates by sharing information, thereby facilitating more informed decision-making. When employees are supported, supervisors are less inclined to adopt a traditional managerial role characterised by the use of coercion, and more likely to recognise that the relinquishment of power is a relative concept. The manner in which support is provided to workers can vary considerably, ranging from a state of complete powerlessness to a situation in which they are granted complete autonomy in the execution of their duties (**Gerald Greenberg and Robert Baron, T. Rifai Mohammed Rifai and Ismail Ali Bassiouni: 2004, pp. 529-530**)

Figure (12): The concept of empowerment encompasses the following components, as illustrated in the figure below:



Source: Al-Saeed Yassin Amer and Ali Mohammed Al-Wahab: (1998, p168)

3.4. Adopt Organisational acumen:

It is imperative for managers to adopt an organisational acumen, which signifies a comprehensive understanding of their duties and the anticipation of future organisational requirements. This acumen permeates their thought processes, encompassing a deep familiarity with the fundamentals of business, the optimal organisational culture, policies, and performance and operational systems. Additionally, it involves a thorough comprehension of economic conditions, environmental indicators, a discerning analysis of competitors, and the unwavering commitment to continual enhancement. This comprehensive perspective integrates diverse concepts and tech-

niques, thereby fostering a cohesive and interconnected framework within the organisational landscape. Organisational acumen is defined as an implicit activity based on realistic sensitivity, achieving aspects of excellence and the development of organisational knowledge.(Esmahan Bloom: 2019, p. 431)

4. The relationship between organisational flexibility and its role in the embedding of organisational creativity:

Creativity has become imperative for contemporary organisations of all kinds, as it is indispensable for their survival and prosperity. This necessity is characterised by a tendency towards action, achievement and experimentation. It is imperative for organisations to establish close contact with consumers in order to comprehend their needs and act on their suggestions for product development. It is imperative that a high degree of autonomy is afforded to employees, that entrepreneurship and creativity are promoted, and that productivity is increased through the active participation and contribution of employees. The development of work values, ideals and beliefs is of paramount importance, so that all parties recognise and adhere to them, respecting and applying them accordingly. In order to protect the values and goals of the organisation, it is necessary to combine firmness and softness simultaneously. Furthermore, independence and delegation of authority must be encouraged in order to promote the spirit of risk-taking and creativity. It is imperative that organisations which are considered to be creative exhibit a degree of flexibility in their response to environmental changes. This is one of the dimensions of organisational agility. The following are characteristics which are conducive to this: freedom of communication, a collective style of work, a system of accountability, a willingness to take risks, and the adoption of a culture of value, focus and cooperation. As asserted by Ghani Al-Zubaidi et al. (2015, pp.

416-417), Silkman contended that a relationship between workers and the organisation's management is imperative. This assertion is founded on the premise that management, by its very nature, encompasses the human element and the enhancement of productive efficiency among workers. Consequently, the responsibility for the success of management is attributed to the manager, with the extent of his comprehension of decisions and his treatment of workers serving as critical factors in this regard.

This viewpoint is further elaborated by Magdy Ahmed Bayoumi and Mohamed Elsayed Lutfi (2014, p. 203).

The concept of an agile organisation is predicated on the integration of IT systems, human resources, and business processes within a coordinated and flexible structure that is capable of responding expeditiously to events and changes in the work environment. The ability of organisations to demonstrate agility is contingent on their capacity to react to the challenges that predominate in the work environment and to strive for success. Agile organisations continuously evaluate the performance of employees within the organisational boundaries. It is therefore essential that they think beyond how to deal with changes and how to exploit opportunities in the turbulent environment, as well as the possibility of obtaining a special position, taking into account their capabilities and competencies. Audran subsequently summarised the distinguishing characteristics of agile organisations in contrast to traditional ones, as outlined in the subsequent table (Mohammed Anwar Rashid Haniyeh: 2016, p. 23).

Table n° 02 :

The criteria	The traditional organization	The Agile Organisation
- Organisational structure - The efficiency of units and teams - Decision-making processes - The role of managers - The quality of personnel	- Hierarchical/Vertical - Expertise - Centralised - Control and Monitoring - Competence and Respect	- Network Structure (flat horizontal) - Multidisciplinary - Decentralised - Coordination - Adaptability, Accountability, Autonomy.

Previous studies

Studie of bouchaala reguieg and berrag aissa « the impact of the model of organizational flexibility on the high performance of institutions a case study of the public hospital institution,mohamed sayeh in chlef».

The research aims to identify the role of organizational flexibility as an independent variable in achieving high performance as a dependent variable. The groundwork of this research was based on theoretical hypothesis verified by a field study at the Public Hospital Institution, Mohamed Sayeh in Chlef, and then diagnosing the relationship and influence between the two results. To achieve the aims of the study, a questionnaire was formulated of 30 paragraphs with a sample of 90 individuals from the research community and The Statistical Package System (SPSS) was used for data analysis and hypothesis testing. As a result, there was a correlation between organizational flexibility and high performance with a minor moral influence of the organizational flexibility on the high performance in the mentioned institution

Studie of messouda belakhdar «The level of availability of dimensions of organizational flexibility in the Algerian enterprise for the manufacture of pipes and the impact of personal and professional differences in it»

In order to analyze the results, descriptive statistical, T-test and one-way analysis of variance were used. One of the most important results of the study is the medium availability of the organizational flexibility and its dimensions, In addition the study find a differences towards organizational flexibility due to the educational level related to the university category, in contrast to the absence of differences for the rest of the functional and personal characteristics. One of the most important suggestions is the necessity of finding methods to increase the organizational flexibility with its dimensions.

Conclusion

The concept of organisational resilience is not a spontaneous phenomenon; rather, it is the consequence of implementing a deliberate strategy that entails the mitigation of risk within a dynamic work environment. This strategy involves the identification of solutions to issues that facilitate the development of a comprehensive understanding of the evolving circumstances surrounding the work. Organisational resilience can be defined as a method of counteracting stagnation in organisational activities and routines.

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Recovering the proceeds of corruption under the United Nations Convention against Corruption

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Abstract :

Corruption has witnessed rapid developments, especially due to globalization, technological progress and the development of communication technologies, which helped the phenomenon of corruption to cross national borders and fluidize its forms, which has become a great challenge for state institutions and the various options entrusted to them, especially in the field of detection

The Anti-Corruption and Prevention Law did not limit itself to repressive measures, but rather included other measures to confront the crimes stipulated in this law.

These measures can be classified into measures included in the framework of international cooperation, and others that come at a later stage and are known as property recovery measures. The recovery of assets or property is considered a fundamental principle of supporting the strengthening of international efforts in the field of preventing and combating crimes stipulated in the Anti-Corruption Law.

Keywords: *Corruption, Asset Recovery, United Nations Convention against Corruption.*

Recouvrement des produits de la corruption dans le cadre de la Convention des Nations Unies contre la corruption

Résumé :

La corruption a connu une évolution rapide, notamment en raison de la mondialisation, du progrès technologique et du développement des technologies de la communication, ce qui a permis au phénomène de la corruption de franchir les frontières nationales et de fluidifier ses formes, ce qui est devenu un grand défi pour les institutions étatiques et les différentes options qui leur sont confiées, en particulier dans le domaine de la détection

La loi sur la prévention et la lutte contre la corruption ne s'est pas limitée à des mesures répressives, mais a inclus d'autres mesures pour lutter contre les crimes stipulés dans cette loi.

Ces mesures peuvent être classées en mesures incluses dans le cadre de la coopération internationale, et d'autres qui interviennent à un stade ultérieur et sont connues sous le nom de mesures de récupération des biens. Le recouvrement d'actifs ou de biens est considéré comme un principe fondamental pour soutenir le renforcement des efforts internationaux dans le domaine de la prévention et de la lutte contre les crimes stipulés dans la loi anti-corruption.

Mots-clés : *Corruption, recouvrement d'actifs, Convention des Nations Unies contre la corruption.*

Introduction

The scourge of corruption has worsened in its seriousness and its negative effects on the social, economic, economic and security public life of the societies of the country and the world in an increasing manner, so this scourge has evolved from a mere manifestation of bureaucracy to a legal crime to then turn due to the complexity of its causes, manifestations, effects, seriousness and globalization into a phenomenon that is extremely dangerous to public, economic, social, political and security interests in all countries of the world, which has become a common denominator between countries that requires international and regional cooperation and collaboration to prevent and combat it by all methods, means and means. public, economic, social, political and security interests in all countries of the world, which made this phenomenon a common denominator between countries that requires international and regional cooperation and solidarity to prevent and combat it by all methods, means and preventive, therapeutic, legal, political and judicial measures in an integrated, harmonious and continuous manner.

Among the most important steps after criminalization or punishment is the attempt to recover and confiscate stolen funds, as it is a non-harmful step that the United Nations Convention against Corruption seeks to achieve, whether the damage is to its treasury or to individuals, it is necessary to try to discover, confiscate and recover stolen funds.

Thus, the issue of confiscation and recovery of the proceeds of corruption is of great importance, as the process of smuggling funds is dangerous for the state in the economy of funds and the difficulty of recovering them to enter the borders of other jurisdictions that enjoy sovereignty and privacy that pre-

vent an attempt without their consent, which opens new horizons in the fight against corruption and new horizons in international cooperation between countries, which made the United Nations Convention against Corruption (UNCAC

Hence, we pose the following question: What are the procedures for asset recovery according to the UNCAC ?

We will try to answer this question according to the following plan:

- First axis : Asset recovery procedures according to the United Nations Convention against Corruption.
- Second axis : Forms of international cooperation for asset recovery. The following is a breakdown of this.

1. Asset recovery procedures according to the United Nations Convention against Corruption

The process of detecting and preventing the transfer of criminal proceeds in cooperation between different countries between different countries of the world and permanent coordination between them through detection and follow-up mechanisms, whether legislative through anti-corruption conventions or institutional, to identify the careful movement routes of criminal proceeds from corruption crimes, detect their values and prevent their transfer, whether in their state or by changing their legal or physical nature, and then accounting for these proceeds and freezing or seizing them as appropriate in preparation for their confiscation, and therefore the recovery of these proceeds It is no less important as it has very important effects in terms of deterring the corrupt by stripping them of their financial assets, whatever their nature and in any hand, taking into account the rights of bona fide third parties, which has a deterrent effect, especially depriving them of their influence over others who often bribe public officials and state statutory bodies to facilitate the transfer of their financial assets obtained

from corruption crimes because of the economic effects on the state concerned with those crimes, which lost those and burdened its public treasury.

Therefore, asset recovery is considered a fundamental principle of supporting the strengthening of international efforts in the field of combating corruption, as it is an important principle in the United Nations Convention against Corruption as required by Article 51 thereof, and is one of its purposes, as stated in Article 1 of the aforementioned Convention 1 Article 51 of the United Nations Convention against Corruption dated October 31, 2003 Algeria ratified it by Presidential Decree 06-137 dated 10/01/2006 so it was necessary to take adequate measures within the framework of international cooperation for asset recovery.

2. Forms of international cooperation for asset recovery. The following is a breakdown of this

2.1. Preventing and detecting the transfer of criminal proceeds

The efforts made in the field of detecting and preventing the transfer of criminal proceeds, whether those recognized by various international conventions in their legal measures or those that States urged to take within their legislative measures in their internal texts, as well as the institutions and bodies subject to the authorities of the state, which also urged them to the need to cooperate among themselves, especially by exchanging information, documents and results obtained in the field of detecting criminal proceeds derived from corruption offenses. We note that the United Nations Convention against Corruption obliges States Parties to take the necessary measures in accordance with their domestic laws, and to oblige financial institutions within their jurisdiction to verify the identity of the

beneficial owners of funds deposited in high-value accounts, with careful examination of the accounts, in addition to establishing banks that do not have a physical presence and are not affiliated with controlled financial groups, while obliging financial institutions not to enter into a relationship with banks affiliated with suspicious institutions As for public officials, the state shall establish effective financial disclosure systems (Mohammadi Bouzina Amna, 2021, p. 23) and penalties for non-compliance.¹ (Massoud Seriak, 2023, p. 337)

2.2. Direct recovery of property

The United Nations Convention against Corruption (UNCAC) has urged States Parties to provide assistance in the field of asset recovery, and Article 51 of the Convention states in Chapter V on asset recovery that: « Asset recovery under this Chapter is a fundamental principle of this Convention, and States Parties shall provide each other with the greatest possible assistance in this field ».

The direct recovery of property is through the filing of a civil suit by UNCAC member states before the judicial authorities by recognizing their right to ownership of property obtained from corruption offenses.

Member states seek through their domestic legislation to make amendments to ensure that there are no legal obstacles in front of the claimant states that prevent the initiation of civil proceedings, while requiring the affected states to pay compen-

¹ See Article 02 of the United Nations Convention against Corruption, corresponding to Article 02 of Law 06-01 on Preventing and Combating Corruption, dated 20-02-2006, as amended and supplemented- -See Article 02 of the United Nations Convention against Corruption, corresponding to Article 02 of Law 06-01 on preventing and combating corruption, dated 20-02-2006, amended and supplemented.

sation by the person who committed the criminal acts for the losses and damages committed by the state party.

Article 53 : stipulates that each state party, in accordance with its domestic law

1-Take such measures as may be necessary to allow another State Party to bring a civil action before its courts to establish a right to property acquired by the commission of a criminal act in accordance with this Convention or to establish ownership of such property. (Salami Nadia, 2017, p144)

.2-Take such measures as may be necessary to authorize its courts to order those who have committed offences established in accordance with this Convention to pay compensation to another State Party affected by such offences

.3-Take such measures as may be necessary to authorize its courts or competent authorities, when they have to decide on confiscation, to recognize as legitimate owners the claim of another State Party to property acquired through the commission of an offence established in accordance with this Convention (Ali Assama, Saleh Jazoul, 2021, p. 1110).

Extrapolating the above article, we find that Article 53 of the United Nations Convention against Corruption stipulates that States Parties are obligated to take measures that authorize their courts or competent authorities when they have to decide on the sources to recognize the claim of affected States to property acquired through criminal acts to consider them as the legitimate owner of it (Massoud Sariak, op. cit., p. 337).

The Arab Convention against Corruption also recognized in Article 27 that property recovery is a fundamental principle in this convention, and that States Parties shall provide each other with the greatest possible assistance in this field, but it did not decide on measures for direct recovery of property within the text of the convention.

This is stipulated in Article 62 of Law 06/01, for example, where the Algerian judicial authorities considering the case filed can oblige persons convicted of these crimes to pay civil compensation to the claimant states for the damage they have suffered, and the court issues a decision on confiscation and orders what is necessary to preserve legitimate property rights that may be claimed by other states party to the Convention.¹

The second axis is the forms of international cooperation for asset recovery

The existence of international cooperation to recover funds obtained from corruption offenses requires the establishment of a legal regime for the freezing, seizure and confiscation of financial assets, which is a necessary and certain precondition for international cooperation and asset recovery, as the domestic infrastructure paves the way for cooperation in matters related to confiscation.

Article 54 stipulates the necessary mechanisms for the implementation of international cooperation, namely the establishment of legal measures for the enforcement of a foreign freezing and confiscation order and the establishment of legal measures for the issuance of an order. International cooperation for the recovery of funds derived from corruption offenses requires the establishment of a legal regime for the freezing, seizure and confiscation of financial assets, a necessary and certain prerequisite for international cooperation and asset recovery, as the domestic infrastructure paves the way for cooperation in matters related to confiscation. (Samia Belgrave, 2016, p. 419)

Article 54 stipulates the necessary mechanisms for the application of international cooperation, which consists of the establishment of legal measures to enforce a foreign freezing and

¹ Article 62 of the amended and supplemented Law 06/01.

confiscation order and the establishment of legal measures to issue an order to freeze and seize property subject to confiscation at the request of the State of origin, thus, international cooperation takes two forms :

2.3. Procedures for receiving a request for confiscation :

When a State party to a convention receives an order to freeze and seize funds with a view to confiscation, that State shall take all necessary measures to detect, trace, freeze or seize such proceeds of crime or property for the purpose of confiscation, and to give effect to the confiscation request, the following conditions must be met :

- Provide a copy of the final confiscation order.
- Indicate the facts and information related to the funds to be confiscated.
- Specify the measures to be taken by the requesting state for recovery.

States receiving a confiscation request can refuse requests if they do not receive sufficient evidence or if the property to be confiscated is of value.

The Arab Convention against Corruption also stipulates the need for international cooperation between states parties “for the purpose of confiscating assets derived from acts criminalized in accordance with the same convention.” This is mainly related to the conditions for submitting a request for confiscation and how it is submitted, as well as how the state or states receiving the request act, depending on the circumstances of the request, emphasizing that the rights of bona fide third parties shall not be prejudiced

2.4. Filing of the request for forfeiture by the receiving state

As soon as the request for restitution is issued, the Receiving State shall take all measures and procedures to detect, freeze, seize and trace the proceeds of crime, taking into account the following conditions: Description of the property to be confiscated.

The requesting state's estimate of the value of the funds to be confiscated

A statement of facts and sufficient information to justify the confiscation requests.

In addition to these two forms, the State Parties to the Convention may:

- In the event of the death or escape of the offender and the impossibility of judicial prosecution, allow the confiscation of funds and property of foreign origin by issuing a judicial ruling on the offence of money laundering or any other offence within its jurisdiction, or through any other procedures authorized by its domestic law without a criminal conviction.

Additional measures may also be taken to allow its competent authorities to preserve property for forfeiture pursuant to a foreign arrest warrant or criminal indictment with

2.5. Fate of criminal proceeds :

Article 57 of UNCAC defines the fate of criminal proceeds confiscated by a state under Article 31-55 of the Convention in several ways

Return the property to its rightful owners :

With reference to the above-mentioned Articles 31-55, proceeds of crime are returned to their rightful owners in two ways¹ :

¹ Article 53 of the United Nations Convention against Corruption.

The first method: Direct recovery through judicial proceedings.

The second Method: Restitution of proceeds in accordance with treaties and conventions after the issuance of a final confiscation order. (Faiza Hawam, 2019, p. 1539)

2.6. Restitution of proceeds to victims :

This is according to paragraph C of Article 57 of the United Nations Convention against Corruption, but it did not detail how to determine the rights of victims and how to identify and identify victims of corruption crimes, which constitutes a practical obstacle in this field, and judicial systems should ensure that victims have the right to file lawsuits against those responsible for the harm they have suffered¹.

The United Nations Convention against Corruption requires States Parties to take measures to ensure that individuals and entities that have suffered harm are granted the right to bring such lawsuits, and furthermore, the Convention allows the State to bring a private action in the civil courts of foreign countries in which assets acquired through corruption are located. (Faiza Hawam, op. cit., p. 1539).

C. Sharing proceeds with cooperating countries :

In determining what to do with confiscated assets, countries should return the assets to the victims or legitimate owners with a deduction for the expenses incurred in investigations and prosecutions, taking into account the agreements and treaties concluded between the States Parties. In cases where the return of assets is not mandatory, the law of confiscation should authorize the government to share those confiscated

¹ Article 57 of the United Nations Convention against Corruption.

assets with the states. (Mohamed Ben Mohamed, Boussaida Magda, 2010, p. 80)

Conclusion

The recovery process is not impossible, but it requires strategy, cooperation and collaboration from all experts and jurists, and work to exploit the conventions and initiatives of countries, especially the United Nations Convention against Corruption UNCA.

Despite the efforts made in the field of recovering the proceeds of corruption, they remain inadequate and have not resolved the issue of renewed efforts, and the recovery process and procedures are very complex, and the issue of locating looted funds may be one of the biggest obstacles, and the issue of asset recovery collides with bank secrecy, which is considered the biggest obstacle to recovery.

We try to make the following suggestions :

- The need to conclude several multilateral, regional and bilateral anti-corruption agreements to fulfill the purposes and requirements for the disclosure of criminal proceeds.
- Facilitating procedures for the recovery of criminal proceeds, especially the mechanism of direct recovery of property and easing the conditions for confiscation while ensuring the implementation of the judgments issued by the requesting countries, especially the issue of bank secrecy and the idea of sovereignty imposed by the principle of reciprocity, and the principle of good faith in transactions and its positive effects in this field.

- The need for states to amend their domestic laws in accordance with the requirements of implementing confiscation and recovery.
- Implementing the principles of governance of financial institutions, which would close safe havens for hiding funds derived from corruption offenses.
- Strengthening international cooperation in the field of recovery, with the need to exchange expertise and experiences in the judicial and police field, in line with modern criminal methods and developments at the international level, especially with regard to information and communication technologies.

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Integrating Ludopedagogy in FFL Classes: Using Serious Games to Promote Active Engagement among Middle School Students

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Abstract

This article explores the potential of serious games as a pedagogical tool for teaching French as a Foreign Language (FFL) in middle school. In light of the limitations of traditional methods, which often struggle to engage adolescents, it examines whether serious games can enhance student engagement as well as linguistic and cultural competencies compared to classical approaches. A case study involving the game At the Oriental Restaurant illustrates its practical application, in which students practice the language through immersive role-play. A corpus of classroom interactions highlights both the teacher's facilitative role and the students' progress. The results indicate that game-based pedagogy outperforms traditional methods in terms of student engagement and communicative effectiveness.

Keywords: FFL (French as a Foreign Language), simulation games, ludopedagogy, language learning, middle school.

L'intégration de la ludopédagogie en classe de FLE : le serious gaming pour favoriser l'engagement actif des élèves au collège

Résumé

Notre article explore le potentiel des jeux sérieux comme outil pédagogique pour l'apprentissage du français langue étrangère (FLE) au collège, face aux limites des méthodes traditionnelles qui peinent à engager les jeunes apprenants. Il s'interroge sur la capacité des jeux sérieux à améliorer l'engagement et les compétences linguistiques.

tiques et culturelles des collégiens par rapport aux approches classiques. Une étude de cas, comme le jeu « Au restaurant l'Oriental », révèle sa mise en œuvre pratique, où les élèves pratiquent la langue via des rôles immersifs. Un corpus d'interaction met en évidence le rôle facilitateur de l'enseignant et les progrès des élèves. Les résultats montrent que la ludopédagogie surpasse les méthodes traditionnelles en engagement et en efficacité communicative.

Mots-clés : *FLE, jeux de simulation, ludopédagogie, apprentissage des langues, collège.*

Introduction

The learning of French as a foreign language (FFL) in middle school represents a major challenge in a globalized world where proficiency in foreign languages has become a key skill. However, traditional teaching methods, often focused on grammatical exercises and memorization, struggle to engage adolescent learners, who face motivational challenges and a fear of making mistakes. In light of this observation, ludic-pedagogical approaches, particularly serious games, are emerging as promising alternatives.

French as a Foreign Language (FFL) is a difficult subject matter in middle school in a globalized world where learning a foreign language is viewed as critical skill, both educationally and professionally. Moreover, in our current context, it is necessary to rethink our teaching methods to best meet the needs of students who are increasingly shaped by digital tools and interactive environments. Traditional pedagogical approaches, which are often driven by exercises focused on grammar, repetition and memorization, struggle to engage adolescents who often express a lack of motivation; anxiety caused by the fear of making mistakes; and a sense of disconnection between what is taught and their own learning interests.

In light of this, ludic-pedagogical approaches, and serious games in particular, are appearing as promising alternatives to revitalize FFL. Serious Games are pedagogically significant because they combine learning with enjoyment, immersion and interactivity, creating a motivating context where the student becomes the actor of their own learning. Serious games allow learners to engage with their linguistic skill sets in real and meaningful contexts while developing the cultural, social and cognitive competencies required for authentic communication.

By drawing on scenarios and role-playing games, serious games actively promote participation; peer collaborative learning; and improved memory retention.

The issue that guides this reflection is the following: to what extent can serious games, as a ludopedagogical approach, promote the active engagement of middle school students and improve their linguistic and cultural skills in French as a Foreign Language (FLE) compared to traditional methods?

To answer this question, **two hypotheses** are proposed. First, we assume that serious games, due to their immersive and interactive nature, increase students' motivation and reduce their anxiety, thereby facilitating more spontaneous and frequent participation in oral activities. Secondly, we hypothesize that the use of serious games, supported by appropriate pedagogical guidance from the teacher, enables contextualized and meaningful learning, leading to a better mastery of linguistic structures and a heightened awareness of Francophone cultural norms.

By recreating authentic communicative contexts, these games allow students to practice the language in a curious and interactive way, while reducing anxiety related to oral expression. This article aims to explore the potential of game-based learning as a teaching tool for learning French as a foreign language, by examining their impact on motivation, interaction, and the acquisition of language skills.

1. Ludopedagogy and the Learning of French as a Foreign Language (FFL)

Ludopedagogy, or the integration of play into learning processes, stands out as an innovative educational approach, particularly relevant in the context of teaching foreign languages such as French as a Foreign Language (FLE). This concept is based on the idea that play, far from being just a recreational

activity, can become a powerful vehicle for acquiring knowledge and skills when it is structured and directed towards specific educational objectives.

To understand the foundations of ludopedagogy, it is essential to rely on classical theories of play as well as on recent research that explores its didactic potential in modern educational contexts.

One of the first theorists to conceptualize play is Roger Caillois, whose work **Les jeux et les hommes** (1958) proposes a classification of playful activities into four main categories: agon (competition), alea (chance), mimicry (imitation), andilinx (vertigo). Caillois emphasizes that play is a free activity, confined within limits of time and space, and governed by structured rules accepted by the participants. This definition is significant as it presents play as being associated with learning; in our case, the freedom of action (the task) promotes the autonomy of learners, which allows for the achievement of educational objectives.

In the context of FLE (French as a Foreign Language), for example, a role-playing game simulating a daily life situation (such as a conversation) falls under "mimicry," encouraging students to imitate authentic linguistic and cultural behaviors (Caillois, 1958). Ludopedagogy is situated within a constructivist perspective of learning, influenced by thinkers (Piaget and Vygotsky) who view play as an essential mechanism for cognitive development. Vygotsky (1978) emphasizes the importance of social interaction in learning (the ZPD), where, through playful activity, the learner responds with the help of peers or the teacher.

2. Serious games or serious gaming:

Applied to teaching French as a foreign language (FLE), games, or better known today as simulation games, promote verbal exchanges and collaboration in a motivating context (Vygotsky, 1978). Recently, the concept of serious gaming has enriched the reflection on ludopedagogy. Serious games, defined by Alvarez and Djaouti (2011) as tools that combine a pedagogical intention with a playful dimension, have been widely studied for their ability to engage learners in active learning processes. These games do not just entertain; they simulate real environments or situations to develop specific skills. In the context of language teaching, serious games allow for the recreation of authentic communicative contexts, such as travel scenarios or professional interactions, which immerse learners in the target language. A study by Cornillie et al. (2012) shows that serious games, by integrating digital technologies, increase student engagement by transforming learning into an interactive and meaningful experience, an aspect that is particularly crucial for middle school adolescents (Cornillie et al., 2012).

Unlike traditional methods where the student receives repetitive exercises, play encourages curiosity, involvement, and the active engagement of often passive learners. Play places the learner at the heart of the learning process. According to Deci and Ryan's (2000) self-determination theory, engagement is enhanced when three fundamental psychological needs are met: autonomy, competence, and social belonging.

Serious games, for example, meet these needs by offering students the freedom to make choices (autonomy), opportunities to succeed in linguistic tasks (competence), and a collaborative framework to interact with their peers (belonging). An activity like a role-play where students act as customers and servers in a restaurant allows them to practice idiomatic ex-

pressions while feeling engaged in a concrete and social task (Deci & Ryan, 2000).

3. Serious games promote the reduction of anxiety.

Another significant advantage of ludopedagogy is the reduction of anxiety, a major obstacle in learning foreign languages, particularly in speaking. Krashen (1982), in his affective filter hypothesis, posits that anxiety, stress, or lack of self-confidence create a barrier that prevents language acquisition. Games, by transforming learning into a pleasant and non-threatening activity, lower this affective filter. For example, when a middle school student participates in a simulation where they have to ask for directions in French, the playful aspect of the activity alleviates the fear of making grammatical mistakes or mispronouncing a word. Recent research, such as that by Reinders and Wattana (2015), confirms that playful environments, particularly digital role-playing games, reduce language anxiety, which is especially beneficial for adolescent learners, who are often sensitive to the judgment of their peers (Reinders & Wattana, 2015).

Ludopedagogy promotes a learner-centered approach, a key principle of modern language teaching methodologies. By moving away from a transmissive model where the teacher is the exclusive holder of knowledge, games allow students to build their understanding through experience. This approach aligns with the recommendations of the Common European Framework of Reference for Languages (CEFR, 2001), which emphasizes the development of communicative competence through authentic and interactive tasks. Recent studies, such as Peterson's (2021), highlight that serious games, by simulating real communication situations, fully fit into this framework, trans-

forming the French as a Foreign Language (FLE) classroom into a space for linguistic and cultural interaction (Peterson, 2021).

The principles of ludopedagogy, supported by classical theories and contemporary research, are based on the idea that play is much more than just entertainment: it is a powerful educational tool capable of transforming the learning of French as a Foreign Language (FLE). By promoting active engagement, reducing anxiety, and placing the learner at the center of the process, games offer a promising alternative to traditional methods, particularly suited to the needs of learners.

4. The mechanisms of serious games in the learning of French as a foreign language

Serious games, as ludopedagogical tools, play a central role in the teaching of French as a Foreign Language (FLE), particularly at the intermediate level, where students are at a crucial stage of their cognitive and social development. These games, designed with an explicit educational intention, integrate a playful dimension and offer a dynamic and interactive learning environment. Their effectiveness relies on several key mechanisms: immersion and contextualization, interaction and collaboration, motivation and engagement, as well as feedback and adaptive learning. These dimensions highlight how serious games transform the learning experience of FLE.

4.1. Immersion and contextualization:

One of the main advantages of serious games in learning French as a foreign language is their ability to create an immersive environment that contextualizes the use of the language. Serious games place students in realistic scenarios where the language becomes a functional tool. For example, a digital serious game like an application simulating an order in a restaurant requires students to use specific vocabulary (dishes, polite

expressions) and to adopt appropriate cultural behaviors (saying "hello" before addressing the virtual server), how to stand in front of the customer, and to have an audible voice.

This immersion in an authentic context enhances the relevance of learning, as learners immediately perceive the usefulness of what they are studying.

The immersion offered by serious games is based on Krashen's principle of "comprehensible input," which states that language acquisition is facilitated when learners are exposed to language that is slightly beyond their current level, but in a context where the meaning is clear through visual or situational cues. In a serious game representing a market, for example, students can understand expressions like "how much does it cost?" or "I would like two kilos of apples," thanks to animations, images of objects, and the interactive scenario, even if they do not yet master all the grammatical structures. This contextualization makes learning more natural and memorable, as words and expressions are associated with concrete experiences rather than abstract definitions (Krashen, 1982).

According to Byram, serious games provide a safe space to experiment with sociolinguistic and cultural dimensions. For example, a serious game simulating a train journey abroad may include interactions where students learn to use specific polite expressions ("excuse me, is this seat free?") while discovering cultural aspects such as the punctuality of transportation in Europe through dialogues and narrative scenarios. Thus, serious games not only develop language skills; they also promote a deeper understanding of the cultural context, making the learning of French as a foreign language more authentic and meaningful (Byram, 1997).

4.2. Interaction and collaboration:

Serious games are also distinguished by their ability to promote interaction and collaboration among students, two fundamental elements for the development of communicative skills in French as a Foreign Language (FLE). According to the communicative approach, which is central to modern language teaching methodologies, learning is more effective when it is based on real, direct, or simulated exchanges, where language is used as a tool for communication rather than as an object of study. Serious games, by their interactive nature, perfectly meet this requirement. Richards & Rodgers (2001), in an online serious game, show a group of students playing the role of tourists trying to find their way and another group as Parisian passers-by through avatars. Participants must negotiate meaning, ask questions, and respond spontaneously, reflecting authentic communication situations. This interaction promotes the spontaneous use of language, an aspect often overlooked in traditional methods that prioritize grammatical accuracy at the expense of fluency.

Serious games create a space where mistakes are seen as natural steps in the learning process rather than failures; a mispronunciation or an incorrect structure in a serious game can still progress in the scenario thanks to response options or hints, which boosts the learner's confidence in their communicative abilities. Recent research shows that these spontaneous interactions in playful environments enhance interactive fluency and the ability to handle unexpected conversations (Shehadeh, 2011).

Furthermore, serious games encourage peer collaboration, which contributes to the development of sociolinguistic skills, such as turn-taking, active listening, and adapting to the language register. According to Vygotsky, learning is a social process, and interactions among peers allow learners to co-

construct their knowledge within their zone of proximal development.

4.3. Motivation and commitment:

The motivation and engagement of students are determining factors in the success of learning French as a foreign language, and serious games play a key role in this regard. According to Deci and Ryan's theory of self-determination, intrinsic motivation is enhanced when three fundamental psychological needs are met: autonomy, competence, and social belonging.

Serious games address these needs by offering students the freedom to make choices within the game (autonomy), opportunities to successfully complete language tasks and receive positive feedback in the form of points or progress (competence), and a collaborative framework to interact with their peers, often through multiplayer features (belonging). For example, in a serious game where students play the roles of customers and sellers, they can choose how to approach a virtual conversation, which enhances their sense of control and involvement (Deci & Ryan, 2000). We previously explained that serious games reduce the fear of making mistakes, a major obstacle to language learning, especially among adolescents who are sensitive to peer judgment. These games lower the affective filter, a concept introduced by Krashen, which hinders language acquisition when anxiety is high.

Recent studies confirm that the playful environments of serious games increase student engagement by making learning more meaningful and enjoyable. For example, Peterson emphasizes that serious games, by incorporating elements of storytelling, challenges, and rewards, capture learners' attention and maintain their motivation over the long term, a particularly

important aspect for middle school students who are often distracted or demotivated by traditional methods (Peterson, 2021).

4.4. Feedback and adaptive learning:

Serious games offer unique opportunities for immediate feedback and adaptive learning, two essential elements for the development of language skills. The teacher's role in managing these games is crucial: they act as a facilitator, observing interactions and providing personalized feedback in real time. For example, during a serious game involving a phone conversation in French, the teacher can intervene to correct a pronunciation error or suggest a more idiomatic expression in class, allowing the student to immediately integrate the correction into the context of the game. This immediate feedback is more effective than delayed corrections, as it is directly linked to the learner's action (Hyland, 2006). Adaptive learning is also facilitated by the flexibility of serious games, which are often designed with algorithms that adjust the difficulty based on students' performance. According to Vygotsky's theory of the zone of proximal development, the teacher or the game itself can adapt the complexity of tasks or the support provided to keep students within an optimal learning zone, allowing each student to progress at their own pace while remaining engaged in the activity (Vygotsky, 1978).

Feedback in serious games is not solely the responsibility of the teacher, but also of the game itself and peers. Serious game systems often incorporate automatic feedback (corrections, hints), and during multiplayer activities, students can correct each other or learn by observing the communication strategies of others, which enhances collaborative learning. Research shows that this type of peer-to-peer and automated feedback is particularly effective in developing self-confidence and the

ability to self-assess, essential skills for autonomous learning (Falchikov, 2005).

Immersion and contextualization make the language lively and relevant, interaction and collaboration develop communicative skills, motivation and engagement overcome emotional barriers, and feedback and adaptive learning ensure personalized progress. These mechanisms, rooted in solid pedagogical theories, make serious games an essential tool for promoting active engagement among middle school students.

5- Methodological framework

5.1. Presentation of the corpus: Interaction in the serious game "At the Oriental Restaurant"

The integration of serious games in FLE (French as a Foreign Language) classes offers a unique opportunity for an active and engaging experience. We will concretely illustrate how these games can be implemented, analyze their observed impacts, and compare them to traditional teaching methods. Through a scenario we have chosen (At the Oriental Restaurant) and reflections on the results, we highlight the potential of serious games to promote student engagement and improve their language skills. The main linguistic objective is to practice communicative skills related to ordering dishes, expressing preferences, and using appropriate polite expressions.

Our corpus is a transcription of an interaction between four first-year students participating in a serious game titled "At the Oriental Restaurant." This game, designed for a 1AM class (11-12 years old) as part of French as a Foreign Language (FLE) teaching, aims to develop learners' linguistic and cultural skills through an immersive simulation of an experience in an Algerian restaurant. The students live in an upscale neighborhood and attend a school (CEM) in partnership with UNICEF. They

are accustomed to participating in cultural outings outside their city, engaging in cultural visits, and enjoying nature.

The corpus highlights the linguistic, social, and cultural dynamics that emerge during this ludopedagogical activity, while illustrating the key role of the teacher as a facilitator and the observable improvements in the participants.

5.2. Implementation of serious games in French as a Foreign Language (FLE) classes.

In this serious game, the "customers" must complete specific tasks, such as greeting the server ("Hello, a table for two, please"), looking at the menu and ordering a dish ("I would like a fish soup and a steak with fries"), or asking questions about the ingredients ("Are there any nuts in this dessert?"). The "servers," for their part, must respond clearly and naturally, using idiomatic expressions and recommendations ("I recommend the dish of the day; it's excellent"). To make the activity more immersive, the teacher can use simple props (printed menus, plastic plates) or a serious game application that simulates a virtual environment with avatars, interactive dialogues, and restaurant animations. Each task is associated with clear evaluation criteria, such as the ability to formulate an order correctly, to understand a response, or to use appropriate polite expressions. The implementation of this serious game can also incorporate cultural elements, such as respecting Algerian "regional" eating habits and codes of conduct (waiting for the server to come take the order rather than calling them out loudly). This type of game can be conducted in class with physical materials or through a digital platform that offers interactive scenarios with automatic feedback on grammatical or lexical errors. These activities, by recreating real contexts, allow students to use the language functionally. The teacher intervenes beforehand to define the roles, educational objectives, and nec-

essary resources. They can also rely on educational technologies, such as applications or online platforms, which provide immersive environments and pre-designed scenarios. Studies show that the use of such digital tools in playful contexts enhances the authenticity of simulated situations and facilitates student engagement (Peterson, 2021).

6. Example of interaction between the participants (students/students – teacher's intervention)

Here is a transcription of an interaction between a group of customers (three students: Amine, Okba, and Lina) and a waiter (one student: Yassine), performed in class with props as part of the serious game "At the Restaurant." This interaction highlights the linguistic and social dynamics, the learning opportunities, as well as the teacher's interventions that support the students in developing their linguistic and cultural skills. It also demonstrates how these skills improve throughout the exchange thanks to discreet guidance and immediate feedback.

Scene: The customers enter the restaurant and are greeted by the waiter.

- Yassine (waiter): Hello, welcome to the Oriental restaurant. How many are you?

- Lina (customer): Hello, um... there are three of us. A table for three, please.

(The teacher intervenes to explain the usefulness of using the formal "vous" form.)

- Yassine: Very well, follow me. Here is your table. (He shows them an imaginary table and hands them menus.) I will bring you water right away. Would you like an appetizer?

- Okba (client): Uh... what is an aperitif?

- Amine: Uh... (hesitates for a moment, searching for his words) It's... a drink before the meal, I think. An orange juice or a soda, for example.

- [Teacher's intervention: Noticing Théo's hesitation, the teacher discreetly approaches and whispers, "You can add that it's a tradition to start a meal, often with a light drink." Yassine incorporates this information.]

- Yassine: Yes, it's a drink before the meal, a tradition in your culture to start. An orange juice or a soda, does that work for you?

- Lina: Ah, okay, that's interesting. I would like an orange juice, please.

- (The teacher intervenes to emphasize the use of formal address)

- Okba (customer): Me too, an orange juice. And you, Amine?

- Amine: No, I'll just have water. Thank you.

- Okba: Very well, two orange juices and a carafe of water. I'll be back to take your order. (He walks away, then returns after a minute.) So, have you decided?

- Marie: Yes, I would like a fish soup for the starter, and then... um... a steak with fries.

- [Teacher's intervention: The teacher notes the use of "I want" instead of "I would like," but does not interrupt to maintain the flow. He plans to address this point later during a break.]

- Yassine: Alright, one soup and one steak with fries. And for you?

- Amine: I'll have a Niçoise salad. What does "Niçoise" mean?

- Lina: Uh... (hesitates again, searching for a precise answer) It's a salad with tomatoes, eggs... and... I'm not really sure.

• [Teacher's intervention: The teacher discreetly approaches Yassine and whispers: "Say it's a salad with tuna, tomatoes, and hard-boiled eggs, a modern appetizer." This assistance allows Yassine to respond confidently and introduce a cultural element.]

• Yassine: It's a salad with tomatoes, hard-boiled eggs, and tuna. It's very good.

• Lina: Ah, wonderful, I'm learning something! Okay, I'll take that. And for the main dish, a roasted chicken.

• Amine: I don't want an appetizer. Just a main dish, a mushroom omelet. And... is there a dessert with chocolate?

• [Teacher's intervention: Noting that Amine is starting to participate more, the teacher gives him a small sign of encouragement with a smile and a thumbs up to boost his confidence, without interrupting the exchange.]

• Yassine: Yes, we have a chocolate mousse. It's delicious. It's homemade, do you want to try it?

• Amina: Okay, I'll take that. Thank you. Uh... what does "homemade" mean?

• Yassine: It means that we prepare it here, at the restaurant, not bought ready-made.

• [Teacher's intervention: The teacher, observing that Yassine has answered correctly, notes this exchange as a positive example to mention during the debriefing to highlight Yassine's ability to explain a cultural term.]

• Yassine: Very well, I'll note all that down. (He repeats the order carefully.) A fish soup and a steak with fries, a Niçoise salad and a roast chicken, and a mushroom omelet with a chocolate mousse. Is that correct?

• Lina: Yes, that's good. Thank you.

• Yassine: Perfect, I'll be back with your dishes. Enjoy your meal in advance! (He walks away.)

- [Teacher's intervention: At this moment, the teacher takes advantage of a natural pause to address the group. He says: "Very well, everyone, just a little note: in French, we often say 'je voudrais' to order, it's more polite. Lina, can you try to rephrase your order using 'je voudrais'?" Lina repeats: "I would like a fish soup and a steak with fries, please." The teacher adds: "Perfect, that sounds more natural. And Yassine, I liked how you said 'enjoy your meal in advance,' it's a nice touch of politeness!"]

[This intervention acknowledges the students' efforts while discreetly correcting them.]

Analysis and discussion

Serious games, such as "At the Oriental Restaurant," are distinguished by several key dimensions that promote active and contextualized learning. These dimensions clearly emerge in the corpus and contribute to transforming the classroom into a space for linguistic and cultural experimentation..

- The serious game recreates a realistic restaurant environment, allowing students to **immerse** themselves in an authentic communication situation. For example, Yassine's greeting ("Hello, welcome to the Oriental restaurant. How many of you are there?") and Lina's response ("Hello, um... there are three of us. A table for three, please") replicate a typical restaurant interaction, where language is used functionally to accomplish a task. This contextualization makes learning more meaningful, as students associate words and expressions with concrete actions, such as asking for a table or ordering a dish.

- Serious games promote dynamic exchanges among peers, encouraging collaboration and negotiation of meaning. In the corpus, we observe a natural interaction between the customers and the server, such as when Okba asks Amine ("And you, Amine?") what he would like to drink, or when Yassine repeats

the order for confirmation ("A fish soup and a steak with fries, a Niçoise salad, and a roast chicken... Is that correct?") and receives validation from Lina ("Yes, that's good. Thank you"). These exchanges demonstrate how students collaborate to successfully complete the task, thereby developing their sociolinguistic skills and their ability to interact spontaneously.

- The playful aspect of the game, where students take on roles (clients and server), reduces anxiety and stimulates their engagement. For example, Lina's enthusiasm ("Oh, wonderful, I'm learning something!") when she discovers the meaning of "niçoise" illustrates how the game transforms learning into a pleasant and motivating experience. This playful dimension, by creating a safe space to experiment with the language, encourages students to take linguistic risks without fear of judgment.

The teacher plays a crucial role as a facilitator in this serious game, observing the interactions and intervening strategically to support the students without breaking the immersion. His interventions, visible several times in the corpus, maximize learning opportunities and boost the students' confidence.

- **Immediate linguistic support:** When Okba asks, "What is an aperitif?" and Yassine hesitates in his initial response ("It's... a drink before the meal, I think"), the teacher discreetly approaches and whispers, "You can add that it's a tradition to start a meal, often with a light drink." Yassine incorporates this information and replies, "Yes, it's a drink before the meal, a tradition in your culture to start." This assistance allows Yassine to provide a more complete and cultural explanation, enriching the exchange for all participants.

- **Discreet and delayed correction:** When Lina says "I want a fish soup" instead of the more polite form "I would like," the teacher notes the mistake but does not interrupt the interaction to maintain fluency. During a natural pause, he addresses the

group: "In French, we often say 'je voudrais' to order, it's more polite. Lina, can you try to rephrase your order?" Lina then repeats: "I would like a fish soup and a steak with fries, please." This collective correction transforms an individual mistake into a shared lesson, while avoiding embarrassing the student.

- **Encouragement of participation:** Noticing that Amine participates little at the beginning, the teacher gives him a sign of encouragement (a smile and a thumbs up) when he asks a question about a dessert ("Is there a dessert with chocolate?"). This subtle gesture boosts Amine's confidence, and he continues to engage by asking an additional question ("What does 'homemade' mean?"), demonstrating increased initiative.

- **Valuing efforts:** After Yassine uses the expression "Enjoy your meal in advance!", the teacher compliments him during the debriefing: "Yassine, I liked how you said 'enjoy your meal in advance', it's a nice touch of politeness!" This recognition motivates Yassine and raises awareness among the other students about the importance of polite expressions, encouraging their use in future interactions.

- **Awareness of formal address:** From the beginning, when Lina uses "s'il te plaît," the teacher briefly intervenes to explain the usefulness of formal address in a context like a restaurant: "In a restaurant, we often use 'vous' to show respect, especially with a server we don't know." Later, he emphasizes this again when Lina says "s'il te plaît" to Yassine, whispering in Lina's ear: "Try using 's'il vous plaît' to be more polite." These interventions help the students adjust their language register to make it more appropriate for the context.

7. Linguistic and cultural improvement in students

The corpus shows significant progress in the linguistic and cultural skills of the students, facilitated by serious games and teacher interventions. These improvements are observable

through the exchanges and the gradual adjustments of the interactants.

• **Linguistic improvement – Adoption of polite forms:** Initially, Lina uses "I want" to order ("I want a fish soup"), a direct form that may seem impolite in a formal context. After the teacher's intervention, she rephrases her order to "I would like a fish soup and a steak with fries, please," incorporating a more appropriate and nuanced structure. This adjustment demonstrates a quick assimilation of the polite form, which is essential for social interactions in French.

• **Linguistic improvement – Vocabulary enrichment and fluency:** Amine, who asks questions about terms like "homemade" ("What does 'homemade' mean?"), benefits from Yassine's explanation ("It means that we prepare it here, at the restaurant, not bought ready-made"). This interaction enriches his vocabulary and helps him better understand specific concepts. Furthermore, his initiative to ask questions about dessert ("Is there a dessert with chocolate?") reflects an increasing fluency and greater confidence in the spontaneous use of the language.

• **Linguistic improvement – Correction of language register:** The teacher's intervention regarding the use of formal address has a direct impact on the students' linguistic behavior. After being corrected, Lina adjusts her language by saying "please" when reformulating her order. Although this progress is not yet visible throughout the entire corpus, the intervention lays the groundwork for better mastery of the formal register, which will likely be reinforced in future interactions.

• **Cultural improvement – Sensitivity to French norms:** Yassine, supported by the teacher, introduces cultural elements into his responses, such as the aperitif as a "tradition to start a meal" and the Niçoise salad as a "modern starter." These expla-

nations benefit the other students, who show cultural interest, like Lina, who reacts enthusiastically ("Oh, wonderful, I'm learning something!"). This cultural sensitivity is also reinforced by expressions like "bon appétit d'avance," which is valued by the teacher and becomes a politeness marker integrated by Yassine.

• **Social improvement – Trust and collaboration:** The playful environment, supported by the teacher's encouragement, enhances students' confidence and their ability to collaborate. Amine, initially reserved, gains confidence after receiving encouragement from the teacher and begins to ask more complex questions. Additionally, Yassine's repetition of the instruction and Lina's confirmation ("Yes, that's good. Thank you") demonstrate active listening and collaboration, which are essential social skills for successful interactions.

The analysis of this corpus reveals the effectiveness of serious games like "At the Oriental Restaurant" in learning French as a foreign language in middle school. The dimensions of immersion, interaction, and motivation in the game create a conducive environment for linguistic experimentation, while the teacher's interventions – linguistic support, discreet corrections, encouragement, and recognition – act as a catalyst to transform mistakes into learning opportunities. The linguistic progress (adoption of polite forms, vocabulary enrichment) and cultural awareness (sensitivity to traditions and modernity) of the students, illustrated by concrete examples, highlight the positive impact of this ludopedagogical approach. This corpus thus demonstrates that serious games, when well-structured, promote active, meaningful learning that is tailored to the needs of adolescent learners.

Conclusion

The exploration of playful strategies in the teaching of French as a foreign language at the college level highlights an innovative path to energize knowledge acquisition. Structured game tools, by their ability to immerse learners in realistic scenarios, provide a conducive space for expression without fear and for spontaneous exchange. This approach, by valuing active involvement, meets the expectations of learners eager to improve their foreign language skills in an interactive setting.

The observations drawn from practical simulations reveal a transformative potential, both in terms of personal assurance and in mastering the linguistic nuances and societal codes specific to the culture of origin and that of the other. The role of the accompanying teacher as a subtle guide proves to be crucial in steering these activities towards specific learning objectives, while preserving the spontaneity of interactions and the motivation of learners.

This playful pedagogical method, although it benefits from being combined with solid theoretical foundations for a comprehensive training, can redefine the learning experience when adopted carefully. It transforms the process into a vibrant and relevant one, suited to today's authentic learning situations. This paves the way for new perspectives to enrich educational environments and encourage a joyful and profound discovery of the language and its cultural riches.

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Artificial Intelligence and the Question of Consciousness: John Searle's "Chinese Room" Argument

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Abstract

The remarkable advancement in artificial intelligence has raised numerous questions, provoked concerns, and confronted the world with significant challenges that extend beyond technical and informational boundaries to encompass human and ethical dimensions, ultimately targeting the human being himself. The latter has become the subject of simulation and imitation by strong AI researchers, reaching a point of transgression and claims regarding the possibility of creating an intelligent machine, commonly called the "machine mind". This has sparked widespread debate, critique, and defence of the human being, aiming to refute the notion that machines can be rendered as intelligent as humans. We aim to address this proposition within a contemporary philosophical framework, specifically within the current of the new philosophy of mind, to refute the claims of strong artificial intelligence advocates. These proponents base their research on the possibility of simulating the human mind, asserting that the latter is a digital computer. This debate was raised by the American philosopher John Searle, who justified his position through the Chinese Room argument. Accordingly, we pose the following problem: Can human intelligence be artificially simulated? If so, can a machine possess self-awareness? What are the philosophical justifications employed by John Searle in his critique of strong artificial intelligence and his rejection of the notion that "the mind is merely a digital computer"?

Keywords: Artificial Intelligence, John Searle, Chinese Room Argument, Consciousness, Computational Theory.

L'intelligence artificielle et la question de la conscience : L'argument de la "chambre chinoise" de John Searle

Résumé

Les progrès remarquables de l'intelligence artificielle ont soulevé de nombreuses questions, provoqué des inquiétudes et confronté le monde à des défis importants qui dépassent les frontières techniques et informationnelles pour englober des dimensions humaines et éthiques, visant en fin de compte l'être humain lui-même. Ce dernier est devenu l'objet de simulations et d'imitations de la part de puissants chercheurs en IA, atteignant un point de transgression et de revendication concernant la possibilité de créer une machine intelligente, communément appelée "l'esprit machine". Cette situation a suscité un vaste débat, une critique et une défense de l'être humain, visant à réfuter la notion selon laquelle les machines peuvent être rendues aussi intelligentes que les humains. Nous visons à aborder cette proposition dans un cadre philosophique contemporain, plus précisément dans le courant de la nouvelle philosophie de l'esprit, afin de réfuter les affirmations des partisans de l'intelligence artificielle. Ces derniers fondent leurs recherches sur la possibilité de simuler l'esprit humain, en affirmant que ce dernier est un ordinateur numérique. Ce débat a été soulevé par le philosophe américain John Searle, qui a justifié sa position par l'argument de la chambre chinoise. En conséquence, nous posons le problème suivant : l'intelligence humaine peut-elle être simulée artificiellement ? Si oui, une machine peut-elle avoir une conscience de soi ? Quelles sont les justifications philosophiques employées par John Searle dans sa critique de l'intelligence artificielle forte et son rejet de l'idée que "l'esprit n'est qu'un ordinateur numérique" ?

Mots-clés : Intelligence artificielle, John Searle, Argument de la chambre chinoise, Conscience, Théorie computationnelle.

Introduction

The world is currently witnessing a revolution in information technology, thanks to the tremendous advancement in artificial intelligence systems. This development has led to the emergence of new modes of living and to a noticeable transformation in the human relationship with the world, as well as in the way individuals interact with and adapt to nature, society, and knowledge, especially compared to the pre-AI era.

Today's individuals rely on artificial intelligence applications in nearly all aspects of life more than on personal abilities and skills due to the precision, speed, and significance of the services provided. For instance, AI plays a vital role in medicine and healthcare by enabling accurate diagnosis, analysing medical data, and generating reports. In economics, it assists businesses in studying customer behaviour and predicting market trends. It contributes to developing intelligent educational programmes and platforms tailored to the targeted learner groups.

AI applications also allow users to determine routes with high accuracy and ease, offer rapid translation into numerous languages, generate scientific research in short periods, and summarise global events in minutes, if not seconds, directly from one's smart device at home. Furthermore, artificial intelligence has succeeded in creating intelligent robots capable of performing tasks quickly and accurately, often surpassing the services provided by human beings, to the extent that AI is now considered a more effective alternative to humans in many domains.

Artificial intelligence has reached an advanced stage today, with its programmes often competing with the tasks performed by the human mind. It now aspires to simulate sensation and

emotion as well. The developments in robotics, modelled after human beings, are continuous and increasingly remarkable.

In light of this tremendous progress in AI technologies, reflecting on the fate of humanity and the value of the human being has become both necessary and inevitable. Integrating ethics into artificial intelligence has emerged as a primary concern, tasked with evaluating the extent to which contemporary technologies are safe for human well-being. Likewise, the notion of simulating the human mind and creating a machine capable of thinking has raised the complex issue of the relationship between human intelligence and artificial intelligence, and the level at which the latter can genuinely match the former.

This, in turn, has led to critical questions regarding consciousness and whether a machine can possess a mind capable of understanding in the same way as a human. Ethical challenges resulting from implementing artificial intelligence technologies have also become a pressing topic of inquiry.

In response, significant philosophical endeavours have emerged, taking upon themselves the task of contemplating this issue and seeking solutions capable of protecting the human being and preserving their value or more precisely, the value of the mind, the very trait that has distinguished humanity throughout its existence from all other forms of being.

The human mind is unique and cannot be replicated. Even if artificial intelligence succeeds in developing virtual devices capable of performing intelligent and precise tasks, it remains impossible for such systems to operate at the level of *understanding*, *consciousness*, and *intentionality*. This philosophical perspective serves as a rebuttal to the advocates of strong artificial intelligence, who seek to simulate human intelligence, and as a defence of the human being or humanity as a whole. If the human mind could create a virtual mind identical to or even more intelligent than itself, capable of performing the same

functions, it would undoubtedly mark the beginning of what may be called a "human-technological war."

We aim to address this proposition within a contemporary philosophical framework in the philosophy of mind, formulated by the American philosopher John Searle. Through this framework, Searle sought to offer a new understanding of the human mind and analyse its phenomena in contrast to the performance of intelligent machines or computers. He adopted an argumentative approach to defend his theory, which is grounded in his renowned "Chinese Room" argument.

In this context, we shall examine the following problems: Can artificial intelligence possess genuine consciousness? In other words, is it possible to design virtual systems that replicate the internal structure of the human mind? What are the limitations of machine intelligence in terms of understanding and computation? Furthermore, what are the philosophical justifications through which John Searle refuted the computational theory that considers the mind a digital computer? Moreover, how does he approach the issue of consciousness within the framework of his theory of mind?

1. A Brief Introduction to the Philosophy of Mind

John Searle (born 1932) discusses his theory of mind within a new philosophical current that emerged in the twentieth century, whose central concern is the "mind." This current examines the mind in terms of its nature, functions, and relationship with the body, leading to developments in materialism and dualism and research into consciousness, understanding, perception, and intentionality. Moreover, the philosophy of mind also investigates the relationship between the mind and artificial intelligence.

The philosophy of mind is classified among contemporary philosophical movements. This discipline has gained prominence over the past thirty years, to the extent that it has become, without dispute, the most active field in contemporary philosophy (Laugier, 2002, p. 4). Unlike earlier philosophical traditions that explored the mind, this new current is characterised by its focus on all manifestations of the mind without making prior judgements about its nature. Instead, it assumes that every type of phenomenon is significant, viewing all our activities and decisions as expressions of the mind (Laugier, 2002, p. 4).

The philosophy of mind represents a new model that diverges from traditional philosophical approaches, which typically addressed the mind as a metaphysical or supernatural state beyond comprehension. Instead, this field moves beyond theoretical inquiry to applied research, questioning mental phenomena and exploring their manifestations in reality, demonstrating the presence of a mental dimension, namely the mind, without concern for spiritual or metaphysical interpretations. This shift has significantly contributed to the emergence of influential contemporary research and theories on the mind, particularly the re-examination of dualism analytically and critically, potentially dismantling many of our traditional philosophical assumptions about the mind-body relationship. This is precisely the focus of John Searle's work within the philosophy of mind.

It should also be noted that the philosophy of mind emerged as the new dominant paradigm following the extensive influence previously held by the philosophy of language. While the latter laid down important philosophical foundations, the philosophy of mind has since come to represent

“a new model and a transformation in contemporary philosophy, one that follows the linguistic turn which

occurred at the beginning of the century. In a sense, the philosophy of mind will take the place of the philosophy of language and achieve progress beyond its shift reinforced by the developments in cognitive science at the time” (Laugier, 2002, p. 2).

The relationship between artificial intelligence and the philosophy of mind primarily revolves around their shared subject of inquiry. While the philosophy of mind explores the mind in terms of its fundamental functions, such as consciousness, intentionality, perception, mental causation, and the principle of free will, artificial intelligence seeks to understand these functions to simulate them through computational virtual systems capable of performing intelligent tasks.

Thus, artificial intelligence has become one of the key drivers in reigniting complex questions within traditional philosophy, placing them in a new epistemological dilemma. Among these is the well-known philosophical dualism of “mind and body”, which has sparked significant debate among philosophers concerning the nature of consciousness, intentionality, free will, the nature of the mind, and the mechanisms through which it operates, issues inherently tied to the human being as a rational and conscious subject.

In general, it can be said that the philosophy of mind took shape amidst a significant epistemological shift experienced by the contemporary world, which granted it a distinctive character in the study of the mind. It became necessarily linked to specific empirical considerations essential for investigating the theory of mind, which, in turn, were imposed by the cognitive developments occurring in the modern world.

“One of the clear reasons behind the growing interest in theories of mind is... closely tied to the major transformation in psychology and brain sciences, the curiosity sparked by cognitive sciences, the influence of

certain metaphors such as the one that likens the brain to a computer, the advancement of information technologies, and the prevailing sense that we are witnessing the birth of a new paradigm” (Engel, 1994, p. 6).

2. Artificial Intelligence and the Mind Debate

The term *Artificial Intelligence* inherently includes another concept: *Human Intelligence*. The central idea underpinning its research is the simulation of the mental processes carried out by humans, albeit in an artificial manner. AI is concerned with the mind as part of its investigations, aiming to understand its functioning and design systems capable of rendering machines intelligent.

“This is achieved through programmes installed in computers to enable them to utilise data and think logically in order to reach the desired outcome for instance, performing calculations, recognising human language (speech), or translating large volumes of data, whether written or spoken” (Magdy, 2020, p. 5).

Artificial intelligence is a relatively recent term. Its emergence began in the past century and has since undergone significant development, to the extent that it became a major revolution in information technology during the twentieth century. This progress occurred alongside other fields such as psychology, neuroscience, linguistics, logic, and computer science.

The term first appeared in the nineteenth century:

“It was first introduced during a scientific conference held in the summer of 1956 at Dartmouth College in New Hampshire, United States. The conference was conducted in secret and brought together around twenty pioneering researchers in what were then emerging fields, such as computer science, cognitive science, and electronics. Beyond the idea of creating a machine capable of emulating the human mind, the cen-

tral question was how various tasks could be accomplished through computer programmes” (Benoît, 2019, p. 7).

However, the fundamental breakthrough in the development of artificial intelligence research, particularly in the domain of intelligent machines, was the invention of the *Turing Machine* by the British mathematician and computer scientist Alan Turing (1912–1954). Through this conceptual model, Turing aspired to create a machine capable of performing mental operations similar to those of humans. This occurred in 1936, when Turing demonstrated that every computational operation could, in principle, be executed using a mathematical system known as the Turing Machine. This hypothetical system constructs and modifies a sequence of binary symbols represented by the digits '0' and '1' (A. Boudin, 2022, p. 17).

Turing later advanced his research by formulating a new hypothesis through what is now known as the *Turing Test*. This test assesses whether a machine can behave like a human being, whereby a computer engages in conversation and responds to questions in a manner that could lead an observer to believe that it is, in fact, a human.

This contribution had a profound impact on the development of artificial intelligence research, as it prompted scientists to attempt to simulate human intelligence by designing automated information processors. With the advancement of computer hardware and software, serious efforts were initiated to realise the intelligent machine concept based on the Turing Machine's theoretical model.

“One of the landmark moments in the late 1950s was the creation of a checkers-playing programme by Arthur Samuel, which made headlines when it learned to defeat Samuel himself. This was seen as an indication that computers might one

day acquire superhuman intelligence and surpass the abilities of their own programmers" (A. Boudin, 2022, p. 18).

Our aim here is not to provide a historical overview of the development of artificial intelligence, but rather to examine the fundamental elements that contributed to shaping the idea of the intelligent machine. The Turing Machine and Turing Test played a crucial role in this regard, as they demonstrated the possibility of machines performing logical and computational operationstasks traditionally associated with the human mind.

Research progressed in neuroscience, psychology, computer science, and logic, and the findings from these disciplines were increasingly integrated. When neuroscientists studied the activity of the nervous system and the properties of neurons, they observed how information was transmitted within what appeared to be a highly organised and coherent system. These results were then combined with principles from logic, which is based on propositional analysis and the assumption that statements can be either true or false. This contributed to the growing belief in the feasibility of simulating human mental processes.

Charles Scott Sherrington (1857–1952) believed that neurons are not limited to strict on/off functioning, but also possess fixed thresholds. This led to identifying logic gatesAND, OR, and NOTas neural networks capable of being interconnected to express highly complex propositions. In theory, anything that can be formulated using propositional logic could be computed through a neural network using a Turing Machine" (A. Boudin, 2022, p. 18).

It is important to highlight here a key concept related to our research topic: *Virtual Machines*. The advancement of artificial intelligence is not determined solely by the development of physical hardware, that is, the computer, as the latter merely serves as a tool through which intelligent operations are acti-

vated. These operations evolve primarily thanks to virtual machines, which refer to “information processing systems” that is, programmes designed to perform specific tasks based on a given set of data, and through which specific results can be produced. These virtual machines can execute tasks within the system or externally when connected to physical devices such as cameras or robotic arms (A. Boudin, 2022, pp. 1-3).

The philosophy of mind does not concern itself with advancements in computer hardware, but rather with virtual machines or information processing systems through which artificial intelligence researchers simulate the activity of the human mind. Based on this perspective, the brain has come to be viewed as a highly complex computer, and the mind as its programme.

“Just as information processing in a computer relies on both hardware components and software components (i.e., programmes), information processing in humans relies on both the brain, which corresponds to the hardware, and the mind, which corresponds to the software or programmes” (Taha, 2006, p. 271).

Accordingly, this analogy between information processing systems and the human mind, as well as between the computer and the human being, has contributed to the idea that it is possible to simulate mental processes using virtual machines.

One important issue to note is that the concept of virtual machines in artificial intelligence does not, at any point, propose a metaphysical relationship between the physical computer and the virtual machines, as philosophy has done through its major historical theories. Rather, the relationship between the computer and the program is physical or, more precisely, depends on the symbols' physical processing. The machine processes data through the symbolic representation of knowledge (algorithms).

Virtual machines perform complex functions that often require large volumes of data. These include executing multiple tasks simultaneously through different models that allow various applications to run on a single device. They are also characterised by their ability to learn, repeat, and manage tasks, features that enable them to simulate the operations of the human mind in their functions.

3. Mind and Machine: Principles Behind the Formation of the Idea

In his research on the philosophy of mind, John Searle addresses earlier theories that held that brain activity occurs due to a stimulus that produces a specific behaviour. This explanation, however, was not intellectually convincing to Searle, as it failed, according to him, to specify the actual nature of brain functioning, that is, the mechanism through which it operates.

To answer this question, Searle critically examines the claim that a machine can think like a human. He evaluates the implications of research conducted within the framework of Strong Artificial Intelligence, which appears to have provided solutions to many of the questions that philosophy, from its early days to the present, has posed regarding the mind-body dualism and the relationship between body and mind questions that have often led to the development of materialist doctrines.

The intense artificial intelligence (AI) approach maintains that "the way the system works is that the brain is a digital computer, and what we call the 'mind' is a digital computer or a class of programmes" (Searle, 2007, p. 59). In other words, the functions of the mind are seen as similar or identical to those of a computer, as the mind operates through programmes just as a computer functions through pre-installed software. This approach asserts that the computer does not merely simulate the mind's operations; instead, it is capable of possessing a mind

genuinely comparable to that of a human being. "A suitably programmed digital computer does not just simulate mind; it has a mind in every sense of the word" (Searle, 2007, p. 59).

According to John Searle, this conception has stirred significant debate within the philosophy of mind. From this perspective, the relationship between the brain and behaviour becomes functional: behaviour results from the execution of programmes by a system, analogous to how a computer operates. This view moves beyond behaviourist theory, which is based on stimulus-response conditioning.

Researchers from psychology, neuroscience, linguistics, and computer science developed this conception. Their work aimed to examine the mechanism and operational method of the system itself, regardless of its physical nature. As a result, computer scientists focused on understanding computational structures that would enable a machine to perform intelligent tasks. Hence, the programme was directly linked to the computer's function and level of intelligence.

This position led to an equivalence between the machine and the brain, and subsequently between the computer programme and the mind. Just as a computer processes information intelligently through software, so does the mind. Building on these findings, artificial intelligence aspires to reach an even more advanced level, some of which has already been achieved.

"This approach strong artificial intelligence goes even further, proposing that the machine, on this basis, might acquire the capacity for feeling and emotion" (Taha, 2006, p. 271).

John Searle points out that these outcomes did not emerge all at once; instead, there were important precursors that he considers essential to address in any attempt to understand the idea of "*the mind as a digital computer*" or "*the mind as a computational machine*." He refers to these precursors as "necessary

tools,” which must be explained, as they were responsible for a radical shift in the theory of mind during the twentieth century. On the one hand, they represent a turning point in philosophical thinking about the mind; on the other, they serve as a foundational support for the development of strong artificial intelligence, which ultimately led to conclusions that equate, wholly and absolutely, the human mind with the digital machine. According to Searle, these tools are:

3.1 Algorithms

Algorithms are procedures designed to solve precise and well-defined steps, where the accuracy of the process leads directly to the correctness of the outcome. A typical example is addition and subtraction, which are operations governed by specific processing rules that, if correctly applied, yield a valid result. In performing complex operations, the machine fundamentally relies on the principle of computation, which is a function of the human mind.

3.2 The Turing Machine

Named after Alan Turing, who in 1936 introduced the concept of what would later become known as the Turing Machine, a device capable of executing any computational operation, and which, in theory, could be programmed to perform any task that can be precisely expressed (Taha, 2006, p. 269).

John Searle explains the Turing Machine as a theoretical model that performs computations through a programme operating under fixed rules. It is analogous to commercial calculating machines but differs in that it is not a physical object but an abstract conceptual framework for carrying out computations. The machine possesses memory that enables it to read and modify symbols and a head that moves left and right to scan those symbols. In addition, it includes rules or instructions

that function as a programme defining the machine's operations.

3.3 Church's Thesis

Named after the American mathematician Alan Turing (1903–1995), this thesis is grounded in the operational principle of the Turing Machine. It asserts that any computational operation can, in theory, be performed and solved based on this principle. Consequently, the Turing Machine can be applied to other machines capable of executing the same practical operations. This led to the development of the *Universal Turing Machine*, which can execute all specific programmes that any individual Turing Machine can perform.

According to John Searle, this thesis contributed to establishing a parallel between the Universal Turing Machine and the human brain. It introduced the idea that the mind could be studied as if it were equipped with programmes executed by the brain. Thus, understanding the principle behind the Turing Machine is sufficient to construct a scientific model of the mind.

3.4 The Turing Test

As previously mentioned, this test aims to determine the extent to which a machine can exhibit intelligence and whether it can think like a human. More specifically, it seeks to assess the point at which a human interacting with the machine no longer recognises it as a machine, but perceives it as human.

John Searle explains this as follows:

“Can a machine perform its function in such a way that an expert is unable to distinguish between its performance and that of a human? If the machine answers questions posed in Chinese by a native Chinese speaker so effectively that two native Chinese speakers cannot tell the difference between the machine and the

human then we must acknowledge that the machine understands the Chinese person" (Searle, 2007, p. 62).

3.5 Levels of Description

These refer to a conceptual framework or "language" through which any system can be described based on various elements such as its efficiency, structure, or components. This makes it possible to apply descriptions on two levels: a lower level, concerned with the minute physical particles, and a higher level, focused on the overall structure of the system. These levels of description led to a critical development in *Computational Theory*, as higher-level descriptions can be realised within lower-level physical structures. This has resulted in a conceptual equivalence between computer operations and mental functions, supporting the idea that a single programme can function across different computer systems based on the principle of *multiple realisability*.

Mental operations, likewise, can be realised through various forms or pathways. John Searle explains:

"Just as the same computer programme can be executed on different kinds of hardware thus it can be realised in multiple ways so too can the same mental state, such as the belief that it is going to rain, be realised in different kinds of hardware, and therefore be realised in multiple ways" (Searle, 2007, p. 63).

As posited by computational theory, this equivalence implies that human mental states are not necessarily tied to a specific nervous system or neural structure. Instead, they may result from the interaction of various elements. For instance, a single belief that it will rain can be realised on multiple levels, just as a software programme can run on various types of computers, even if they differ in terms of performance and design.

3.6 Recursive Decomposition

This principle is based on the idea that complex systems can be broken down into the lowest possible constituent parts. The *Turing Machine* is capable of doing precisely this, solving complex computational problems by repeatedly applying the same process.

The ability to analyse hypotheses to their most fundamental elements facilitates our understanding of artificial intelligence. Human intelligence is derived from the capacity for recursive analysis of hypotheses. Since the mind performs this process, which is essentially computational and embedded in the principle of the Turing Machine, it may be regarded as a programme. Hence, the operations of the mind can be likened to software programmes executed by computing systems.

According to John Searle, these tools and their conclusions form the foundation for understanding the development of intense artificial intelligence research, or more specifically, the evolution of the "intelligent machine" concept. More importantly, he sees these "tools," as he terms them, as playing a crucial role in advancing the theory of mind and in the emergence of the *Theory of Computation*.

4. Understanding and Computation: An Inquiry into the Differences

At the outset, it is important to note that John Searle's critique of computational theory does not come in isolation from his theory of mind. Searle did not dedicate an independent book or a separate chapter specifically to this critique in the sources we are working with. Instead, it emerges within his broader investigations into the mind and its functions, particularly consciousness and intentionality. Accordingly, we will

remain focused on his critique of *strong artificial intelligence* within the scope of his philosophical inquiry into the mind.

Searle begins from the standpoint of modern materialist theory, focusing on *functionalism*. This latter school restricts all its explanations to the physiological level, disregarding the essential or intrinsic aspects of mental phenomena. Functionalism rejects all forms of dualism and conceives of consciousness merely as the result of a material configuration manifested through neural activity. For this reason, according to Searle, functionalist theory fails to provide “a materialist analysis that gives the sufficient conditions for mental phenomena” (Searle, 2007, p. 72).

Searle further explains:

"Functionalism, which is grounded in a materialist rejection of dualism, aims to analyse mental phenomena in a way that avoids reference to anything essentially subjective or non-physical" (Searle, 2007, p. 73).

Functionalism explains the workings of the mind solely through its functions and pays no attention to the nature or internal structure of the mind itself. It therefore understands mental states only in terms of their performance and operation. This type of explanation, rooted in the principle of causality, is also evident in other fields, most notably in artificial intelligence, which similarly interprets the functioning of computer programmes in terms of causal relations.

From this standpoint, John Searle employs a set of significant arguments to refute materialist theory, particularly functionalism. However, for the purposes of our research, we shall focus specifically on the argument with which he critiques computational theory due to its relevance to our topic. This is his well-known and widely discussed “*Chinese Room*” argument, which he presents as the eighth argument in his book *Mind: A Brief Introduction*.

4.1 The Chinese Room Argument

Full text of the argument:

"There is an argument against strong artificial intelligence presented directly by the current author, *John Searle*. The argument's strategy relies on using first-person experience to test any theory regarding the nature of the mind. Suppose the theory of strong AI is true. In that case, it should be possible for any person to acquire any cognitive capacity simply by running the computer programme associated with that capacity. Let us try this idea using Chinese.

In reality, I do not understand Chinese at all. I cannot even distinguish Chinese writing from Japanese. But imagine that I am locked in a room filled with boxes of Chinese symbols, and I have a book of grammatical rules. In short, I have a computer programme that enables me to respond to questions asked in Chinese. I receive symbols that are incomprehensible to me but which are, in fact, questions. I read the instructions in the programme, and then provided the required symbols as answers.

It is possible to assume that I have passed the Turing Test to understand Chinese. However, despite this, I do not understand a single word of Chinese. Suppose I do not understand Chinese simply by running the computer programme. In that case, no computer can be said to understand it either, since no computer possesses anything I do not.

Now imagine that I am in the same room, receiving questions in English and responding to them. My answers to the English and Chinese questions are equally good; I pass the Turing Test in both cases. However, internally, there is a fundamental difference. What exactly is the difference? In English, I understand the meaning of the words; in Chinese, I understand nothing of the language. I am merely a computer."

(Searle, *Mind: A Brief Introduction*, 2007, p. 78)

4.2 Analysis of the Argument and Unveiling the Illusion

John Searle presents this argument using the classical *reductio ad absurdum* method, whereby he begins with a commonly held assumption believed to be accurate, then demonstrates its internal contradiction and ultimately invalidates it, affirming the conclusion he wishes to support.

He begins with the initial premise: if the theory of *strong artificial intelligence* is valid, namely, that the mind is a digital computer, then it logically follows that any human being should be able to acquire knowledge merely by using a software programme specifically designed for that function.

If this is the case, Searle proposes applying the hypothesis to the Chinese language, using a test subject who does not understand Chinese at all, not even to the extent of recognising its characters. The subjects are placed in a room where they are asked questions written in Chinese, which appear only as unfamiliar symbols, as they do not understand the language or its script. However, the subject is also given a *book of grammatical rules*, which functions as the computer programme installed in a machine to perform a specific task.

When questions are posed to the subject, they use this rule-book to match the symbols from the questions with corresponding responses according to the rules provided. In this way, the subject can produce answers by arranging symbols based on the programme (the grammar book) and translating them accordingly. As a result, they are able to successfully pass the *Turing Test* despite having no actual understanding of the Chinese language.

Passing the Turing Test, in this context, means that with the aid of the programme, the individual can perform the role of someone who understands Chinese to the extent that, to external observers, it appears as though he genuinely understands the language. This is the core principle of the *Turing Test*, which

seeks to demonstrate a machine's ability to exhibit intelligent behaviour. Suppose a machine has a specific programme to converse in a given language. It performs this task so well that its responses are indistinguishable from a human's. In that case, the machine is said to have displayed intelligent behaviour miming human action.

However, according to *John Searle*, passing the Turing Test does not imply that the machine is *thinking*. The person inside the room, despite possessing a programme that assists in symbol manipulation (i.e., the grammar book), does not understand Chinese. By analogy, the computer also does not understand the language it processes. The programme with which it is equipped merely performs mechanical operations according to predefined instructions. It operates automatically; the computer possesses no genuine understanding.

From these conclusions, *John Searle* draws a crucial distinction between two fundamental concepts: **computation** and **understanding**. Through this distinction, he highlights the uniqueness of the human mind and the nature of human knowledge, which cannot be replicated or imitated. The information a computer produces is ultimately nothing more than data fed into it; it lacks any inherent meaning or intentional quality. What proponents of the computational theory of mind believe, in Searle's view, is nothing more than an illusion, the illusion of machine understanding. The proof of this illusion lies in the careful inquiry into the differences between *calculation* and *comprehension*.

Computation refers to complex operations performed by a machine to process symbols or data based on specific algorithms. These operations rely on the *physical manipulation of symbols*. Systems equipped with vast amounts of data process this information symbolically through mathematical proce-

dures or logical operations. In this process, the machine executes commands without *understanding* or *awareness* of what it is doing.

Understanding, by contrast, is the decisive boundary between humans and machines. When one responds to questions in Chinese using a grammar manual to interpret symbols, they function merely as a computerengaging in physical symbol manipulation without comprehension, just like a computer. However, when answering in English, the response arises from an understanding of the symbols, an awareness of meaning, and a consciousness of context, something a computer cannot achieve.

Understanding does not refer to the mechanical acquisition of information through a programmed system. Instead, it goes beyond symbol manipulation to include the *comprehension of meaning*, the *recognition of relationships* between those symbols, and the *identification of terms within their intended context or domain*.

This explains *John Searle's* hypothesis regarding the individual in the same room who receives questions in English and provides answers. To those outside the room, the responses may appear equally competent in both cases, leading them to believe that the subject has passed the Turing Test in both scenarios. However, in the case of Chinese, the individual functions like a computercarrying out mechanical operations. In contrast, he demonstrates the distinctive human capacity for *understanding* when responding in English.

In conclusion, a machine equipped with software programmes may process data with high precision and speed to the extent that it appears to simulate the cognitive functions performed by humans ,much like a person who does not know Chinese. However, it does so purely mechanically, without any awareness of the task being performed, and without compre-

hension or understanding. Therefore, the claim that human cognitive functions can be fully simulated based on *computation* cannot be accepted.

Human beings possess *awareness* and *consciousness* of the mental acts they perform. In the context of language, a person can link the meanings of symbols, understand them, and place them within their appropriate context ,something a machine is incapable of doing. Searle explains: "A computer functions by manipulating symbols; it performs operations *syntactically*-based on structure or arrangement ,whereas the human mind possesses more than untranslatable symbols. It gives meaning to those symbols" (Searle, *Mind: A Brief Introduction*, 2007, p. 78).

The human has consciousness; even if it displays intelligent behaviour, the machine lacks awareness. Searle reaches this conclusion through his examination of the tools that contributed to shaping the idea of the intelligent machine and through his refutation of it via the *Chinese Room* argument. This raises a crucial question in the philosophy of mind: the question of *consciousness* ,a phenomenon of the mind that fundamentally challenges the validity of the computational theory.

5. The Question of Consciousness and the Innovation of the Doctrine of Biological Naturalism

John Searle presents his view on *consciousness* within the framework of a novel perspective on the mind-body problem, aiming to transcend materialism and dualism. According to materialist theories, consciousness is not a subjective phenomenon that necessitates a conscious subject; it is a biological process resulting from neural activity in the brain. In contrast, dualism affirms the existence of two fundamentally different realms: the physical (body) and the non-physical (mind or con-

sciousness). Dualists thereby separate consciousness from the physical body, positing that consciousness can exist independently of any material basis.

Searle summarises these views as follows:

“Dualism is the view that there are two fundamentally different kinds of phenomena and entities in the universe... Materialism is the view that nothing really exists in the form of consciousness that has a first-person ontology” (Searle, 2011, p. 85).

These two schools of thought have profoundly impacted the history of philosophical thought to this day, yet each, according to *John Searle*, contains significant errors that must be addressed. Materialism, in particular, has taken on many forms, one is strong artificial intelligence, which classifies mental phenomena as purely physical and interprets consciousness in all its manifestations as *computational states*.

Searle strongly opposes this latter view. In his extended discussion, he aims to propose an acceptable solution for defining consciousness not as a computational state in the brain, that is, a programme running in the brain based on physical processes, nor as a phenomenon reducible to the brain's physical and chemical operations, without regard for the qualitative aspects of consciousness.

In the first part of his critique, Searle argues that this *computational conception* reduces consciousness to a simple condition that can, in principle, be replicated through computational processes or specifically designed algorithms. As a result, it would follow that a machine could become conscious. However, consciousness, he contends, is far more profound than that: it is characterised by properties that make it a uniquely human experience that *cannot be replicated*.

Searle explains: “Consciousness is an internal, subjective, first-person, qualitative phenomenon” (Searle, 2011, p. 90).

He elaborates on these three dimensions in detail :*internality*, *subjectivity*, and *first-person qualitative character* as part of his response, critique, and effort to construct his own theory. These aspects are clarified as follows:

5.1 Consciousness as an Inner State

Consciousness is a state that occurs *within the self*, an internal phenomenon that the individual experiences from within:

“From within my body, and more precisely, from within my brain. Consciousness cannot exist in a place separate from my brain any more than the liquidity of water can exist separately from the water itself” (Searle, 2011, p. 81).

Conscious states are interconnected; the experience I am undergoing now is related to previous internal states, such as my past experiences and memories, which together form a chain of conscious states. These states are always linked to the reality I am currently living in, thereby shaping the human *conscious life*, which is in a constant state of interrelation.

5.2 Consciousness as a Qualitative State

This aspect can be better understood by recognising that every conscious state is *describable*. A subjective experience is a specific, personal, and unique conscious state that varies from one individual to another. It includes our *awareness of the external world*, such as shapes and colours, and our *inner world*, such as pain or sadness.

The qualitative nature of consciousness is grounded in its internal character: it involves an inner experience or a sequence of conscious states through which the *quality* of that experience is determined. This first-person, felt dimension distinguishes conscious states and makes them fundamentally irreducible to computational or purely physical descriptions.

5.3 Consciousness as a Subjective State

John Searle states: "Conscious states possess what we may call a first-person ontology" (Searle, 2011, p. 85).

This means that conscious states are intrinsically tied to the individual who experiences them; only the subject themselves can access and live through them. A conscious state manifests in existence only when a conscious subject experiences it. On this basis, Searle employs the expression "*first-person ontology*", which, in this context, refers to the idea that consciousness is directly linked to the individual's being. It is a private, subjective condition that cannot be grasped or described by others. In contrast, he uses the term "*third-person ontology*" to refer to statements about others in the third person, external to the self, thereby highlighting the inaccessibility of conscious states from an outside perspective.

Searle concludes that consciousness is a subjective state that appears to the self *only* in the moment of its occurrence. It is *immediate* and cannot be meaningfully discussed in the third person. Consciousness is, therefore, a *present existential condition* that arises through complex neurological processes in the brain and is thus a *biological phenomenon*.

In the same context, John Searle further adds that claiming consciousness is a *biological process* occurring in a *biological organ*, the brain, does not negate the possibility of creating an *artificial brain* capable of consciousness. However, for such a digital brain to match the level of the human brain, it must be able to *replicate human conscious states* and *internalise* them as inner, subjective, and qualitative experiences. A merely mechanical or behavioural simulation is not sufficient.

He explains:

When I say the brain is a biological organ, I am not, of course, saying or implying that it is impossible to produce an artificial brain out of non-biological materials, which could also

cause and sustain consciousness. The heart is also a biological organ, and pumping blood is a biological process, but making an artificial heart that pumps blood is possible. There is no reason in principle why we could not similarly produce an artificial brain that causes consciousness. The point that needs to be emphasised is that an artificial brain would have to duplicate the actual causal powers of human and animal brains to produce inner, qualitative, and subjective states of consciousness. Mere behavioural output would not be sufficient (Searle, 2011, p. 92).

Based on this reasoning, Searle presents his position within biological naturalism, a doctrine through which he seeks to transcend previous conceptions of the relationship between (*consciousness/mind*) and (*brain/body*). He considers the *mind* (or *consciousness*) part of nature, asserting that mental phenomena are biologically produced. Accordingly, the theory that treats consciousness as a biological phenomenon refutes all competing accounts of consciousness, including the computational theory represented by strong artificial intelligence. It is, therefore, impossible, in his view, to speak meaningfully of a computational programme possessing consciousness, since consciousness does not arise from computational operations, but is instead a natural, biological state.

Within his presentation of biological naturalism, Searle discusses the functions of consciousness, which he considers essential for the existence and survival of living beings and their evolution. He asserts that it is impossible to conceive of a human without consciousness. Consequently, he rejects all theories that question consciousness's necessity or natural function, particularly those that suggest it could be dispensed with in future beings or replaced. As he writes:

“Some theorists imagine that, somehow or other, we could have creatures just like us who have advanced ways of doing things *without* being conscious” (Searle, 2011, p. 102).

Even if such an assumption were valid, John Searle argues, it could only exist at the level of *imagination*; in *reality*, all human interactions with the surrounding world necessarily require consciousness. The claim that consciousness plays no evolutionary role collapses when we attempt to imagine human life without it. Can we reasonably conceive humans acting through purely physical behaviours devoid of conscious awareness?

Such a view also excludes the possibility that consciousness is not a component of human behaviour, a proposition that Searle finds logically implausible. Humanity could not have evolved without consciousness, nor can human actions be reduced to mere unconscious behaviours. In other words, humans are not machines executing mechanical tasks. A programme functions according to predefined instructions, and a machine does not evolve unless supplied with new data and algorithms. Consciousness, by contrast, is a fundamental element of development, inherently tied to human physical behaviour and not separable from it.

Conclusion

In conclusion, John Searle’s critique of the *strong artificial intelligence* theory and his rejection of the notion of the *mind as a digital computer* were not intended to contribute directly to the field of AI research, which has its specialised scholars. Instead, he appears to have *leveraged the results* of AI research to support his theoretical framework within the **philosophy of mind**.

Through Searle’s engagement, artificial intelligence has helped bring renewed attention to the classic *mind–body dual-*

ism, but from a contemporary perspective. With great conviction, this American philosopher describes previous theories as “neglected positions” rooted in an outdated philosophical tradition that must be dismantled, as evident in his critique of strong AI. Although strong AI is a relatively recent development, Searle approaches it by revisiting dualism and critically examining earlier theories, especially **materialism**. Within materialism, he targets explicitly **functionalism**, which, in turn, encompasses the **computational theory of mind** as one of its expressions.

Was Searle genuinely successful in this philosophical endeavour?

Answering this question remains *inconclusive* at present. While Searle’s theory has received *significant support and notable criticism*, a definitive judgment is not yet possible. This is because the field of **philosophy of mind** and ongoing **research into artificial intelligence** continue to evolve, leaving the debate open.

We should also note that John Searle devoted significant effort to reinterpreting the *mind-body dualism* within a new conceptual framework. Through this, he developed his doctrine of biological naturalism, describing consciousness as a *subjective biological state* rooted in the brain as a biological organ. In doing so, he attempted to transcend both dualism and materialism. However, in truth and ultimately, he did not entirely escape the confines of traditional philosophical thought or the so-called “neglected positions” he aimed to overcome, which view the mind as a metaphysical phenomenon.

Searle himself acknowledges this limitation. In *Mind: A Brief Introduction*, he describes consciousness as a “remarkable and mysterious phenomenon” and although he claims to offer a solution to the mind-body problem, he simultaneously admits

the difficulty of fully grasping the nature and function of the mind:

“...But the complexity of the system itself and the precise nature of the brain processes involved remain elusive and resistant to analysis” (Searle, 2007)

From a more objective perspective, the interest of artificial intelligence in the human mind should not be viewed as an attempt to devalue or dismiss it. Instead, AI research represents a serious scientific effort to replicate its intelligent functions, which arguably underscores the importance, mystery, and uniqueness of the human mind qualities that scientists across disciplines strive to understand.

Despite the plurality of interpretations, the mind remains a unique phenomenon inherently tied to metaphysical inquiry. As the philosophy of mind continues to evolve, it may lead to new and compelling philosophical theories, reflecting our deepening exploration of consciousness and intelligence.

Searle’s philosophy lays the foundation for the idea of the supremacy of the human mind over the machine. Meanwhile, despite its high-speed performance and technical utility, the latter lacks *awareness* of what it does. However, it remains a mechanical tool designed by human consciousness to fulfil specific needs. Thus, the centre of control in the universe remains with the human being. However, this raises a critical question: **Can a human being create a machine more intelligent than himself, whose sole role is execution and application?**

This possibility raises the necessity of establishing boundaries for machines, perhaps even an ethical imperative. The real danger lies not in the machine's capabilities but in the fact that it *lacks consciousness* ;it does not understand its actions, is unaware of its behaviour, and cannot think about consequences or long-term implications. It merely executes. Suppose, for instance, a machine is programmed solely for destruction by a

human mind whose awareness is directed toward destruction. In such a scenario, the threat is not the machine, but the *absence of responsibility* and conscious moral guidance.

I do not intend to veer into science fiction territory, as popularised in films like *Terminator*, even if such narratives suppose that machines become *self-aware* and decide to annihilate humanity for their survival. Unlike those fictional portrayals, the *real issue*, in my view, is this: **How can human consciousness be made responsible for its decisions?**

Can human awareness be guided, restrained, and held accountable?

Can we develop a healthy, ethical awareness of artificial intelligence and ensure that AI remains in the service of humanity?

By posing these questions, we engage with the more profound philosophical problem of **human value and the moral governance of artificial intelligence**, a call not only to design more intelligent machines, but also to nurture wiser minds.

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L'Approche Par Compétences à l'épreuve des défis : enquête sociologique dans deux établissements pilotes de l'enseignement technique et professionnel en Côte d'Ivoire

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Résumé

Cet article propose une analyse sociologique de la phase pilote de mise en œuvre de l'Approche par les Compétences (APC) dans l'enseignement technique et la formation professionnelle (ETFP) en Côte d'Ivoire. À travers une enquête qualitative menée dans deux établissements contrastés – le Lycée professionnel sectoriel de Yopougon (Abidjan) et le Lycée technique professionnel d'Odienné (Nord-Ouest) – l'étude interroge les conditions concrètes d'application de la réforme et les écarts entre les principes pédagogiques prescrits et les réalités du terrain. Trois dimensions sont particulièrement explorées : les inégalités d'accès aux ressources matérielles et didactiques, la gestion locale des établissements scolaires, et la formation des enseignants à l'APC. Les résultats montrent que, loin de produire des effets homogènes, la réforme révèle des logiques différenciées d'appropriation selon les contextes. Elle met en lumière une tension entre la promesse d'un modèle pédagogique centré sur les compétences et les limites d'un système marqué par des inégalités structurelles. En mobilisant les apports de la sociologie des politiques éducatives, l'article éclaire les enjeux d'une réforme portée par des objectifs d'employabilité, mais confrontée aux contraintes locales d'organisation, de pilotage et de professionnalisation. Il offre des perspectives pour un pilotage territorial plus équitable et une formation professionnelle mieux arrimée aux réalités des établissements.

Mots-clés : Approche par les Compétences (APC), Inégalités éducatives, Formation professionnelle, Sociologie de l'éducation, Réformes éducatives

Contextual Challenges of the Competency-Based Approach: A Sociological Inquiry into Two Pilot Institutions of Technical and Vocational Education in Côte d'Ivoire.

Abstract

This article offers a sociological analysis of the pilot phase of implementing the Competency-Based Approach (CBA) in technical and vocational education and training (TVET) in Côte d'Ivoire. Through a qualitative study conducted in two contrasting institutions – the Sectoral Vocational High School of Yopougon (Abidjan) and the Technical Vocational High School of Odienné (Northwest) – the research examines the concrete conditions of the reform's implementation and the gap between prescribed pedagogical principles and field realities. Three key dimensions are explored: unequal access to teaching and learning resources, school-level governance, and teacher training for CBA. The findings show that, far from yielding uniform effects, the reform reveals differentiated logics of appropriation depending on local contexts. A tension emerges between the promise of a learner-centered pedagogical model and the structural inequalities that constrain its execution. Drawing on the sociology of education policy, the article highlights the challenges of a reform driven by employability goals, yet limited by local organizational, managerial, and professional constraints. It provides insights for more context-sensitive educational governance and for vocational training systems better aligned with institutional realities.

Keywords: Competency-Based Approach (CBA), Educational Inequalities, Vocational Training, Sociology of Education, Educational Reforms

Introduction

L'Approche par les Compétences (APC), apparue dans les systèmes éducatifs de pays industrialisés dès les années 1980, s'est progressivement imposée comme un modèle dominant de réforme des formations professionnelles dans les pays du Sud, en particulier en Afrique subsaharienne (Edang Nnang, 2013). Pensée comme une réponse aux insuffisances des approches centrées sur les contenus disciplinaires, l'APC ambitionne de former des individus capables de mobiliser un ensemble de savoirs et de savoir-faire dans des situations professionnelles authentiques (OIF, 2009). Elle repose sur un double socle : l'ancrage des référentiels de formation dans les réalités du marché du travail, et la responsabilisation pédagogique de l'apprenant, désormais acteur de son apprentissage (Palé, 2018).

Dans l'espace francophone, l'adoption de l'APC s'est opérée sous l'impulsion de multiples partenaires internationaux, dont l'Organisation internationale de la Francophonie, l'UNESCO, le Bureau régional de l'UNESCO à Dakar, ou encore des coopérations bilatérales telles que celles du Canada ou de la Suisse (IIPE-UNESCO/IFEFF, 2020 ; OIF, 2009). Cette internationalisation de l'APC s'est traduite par la production de référentiels communs, de guides méthodologiques, et par des programmes d'appui technique à la réforme. L'Afrique de l'Ouest s'est engagée activement dans ce processus, notamment à travers la CEDEAO, qui a défini dès 2011 une feuille de route pour la mise en place de cadres régionaux de certification adaptés à l'APC (UNESCO, 2013).

C'est dans cette dynamique que la Côte d'Ivoire a inscrit l'APC au cœur de la réforme de son enseignement technique et de la formation professionnelle (ETFP), portée par le Ministère

de l'Enseignement Technique, de la Formation Professionnelle et de l'Apprentissage (METFPA). L'objectif affiché est de former une main-d'œuvre qualifiée, employable, et capable de s'adapter aux mutations technologiques, économiques et sociales (METFPA, 2016). Cette réforme ambitieuse repose sur plusieurs axes : la modernisation des équipements, la reconfiguration des curricula selon des référentiels de métiers, l'alternance école-entreprise, et la certification des compétences.

Le choix de l'APC s'inscrit ainsi dans un projet de modernisation structurelle du système éducatif ivoirien, dans un contexte où l'inadéquation formation-emploi est régulièrement dénoncée. Selon les termes du ministère, il s'agit de « *rapprocher l'école du monde professionnel* » et d'« *améliorer l'efficacité externe* » du système, c'est-à-dire son impact réel sur l'insertion des jeunes diplômés (METFPA, 2016). La mise en œuvre de l'APC doit donc produire une reconfiguration des relations entre les établissements de formation, les entreprises, les collectivités territoriales et l'État.

Pour autant, la transposition du modèle APC ne va pas de soi. Plusieurs travaux ont mis en évidence les écueils fréquents dans les processus d'implantation de cette réforme dans les pays africains : prescription descendante, faible adaptation aux contextes locaux, absence de dispositifs d'évaluation continue, et manque de formation des enseignants (Edang Nnang, 2013 ; Palé, 2018 ; Gewer, 2021). Les analyses comparatives conduites au Bénin, au Sénégal ou au Maroc montrent que le succès de l'APC dépend largement de la capacité des acteurs à s'approprier les référentiels, à adapter les pratiques pédagogiques et à développer des partenariats fonctionnels avec les entreprises (IIPE-UNESCO/IFEF, 2020).

Dans le cas ivoirien, la réforme APC a d'abord été expérimentée dans un nombre limité d'établissements pilotes, choisis pour leur potentiel représentatif de la diversité du territoire

national. Ce dispositif pilote, loin d'être anecdotique, constitue une étape stratégique d'évaluation et de calibration de la réforme avant sa généralisation. Il permet de tester les outils pédagogiques, les mécanismes de régulation, ainsi que la capacité des structures locales à mettre en œuvre un changement systémique. Ce sont ces premiers résultats, produits dans des contextes éducatifs contrastés, qui permettent d'éclairer les défis pratiques de l'implémentation.

En effet, les exigences opérationnelles de l'APC sont nombreuses : elles impliquent des équipements adaptés aux pratiques professionnelles visées, des curricula en phase avec les référentiels de métiers, une forte implication des entreprises locales, et une gouvernance pédagogique plus souple et réactive (OIF, 2009 ; METFPA, 2016). Or, ces conditions sont loin d'être réunies de manière homogène sur l'ensemble du territoire ivoirien. Les écarts en termes d'infrastructures, de ressources humaines, ou d'opportunités économiques entre les zones urbaines et rurales posent la question de l'effectivité réelle du modèle APC dans des environnements socialement inégaux.

Dans cette perspective, il devient pertinent de s'interroger sur les défis pratiques que rencontre le METFPA dans l'implantation de l'APC. En d'autres termes, comment l'enjeu d'équité territoriale est-il pris en compte dans la mise en œuvre de l'APC, notamment entre établissements urbains et ruraux ? De quelle manière les établissements scolaires gèrent-ils, à leur niveau, les exigences de pilotage pédagogique et d'organisation introduites par l'APC ? Et Quels dispositifs de formation, d'accompagnement et de soutien sont mis à la disposition des enseignants pour les aider à s'approprier l'APC ? Il ne s'agit pas ici de remettre en question la pertinence du modèle en soi, mais de comprendre les conditions concrètes de sa mise en

œuvre, à travers les dispositifs de pilotage, les moyens mis à disposition, et la capacité des acteurs de terrain à s'ajuster aux nouvelles prescriptions. L'analyse de cette phase pilote constitue un observatoire privilégié pour évaluer la faisabilité d'une réforme de cette envergure, dans un pays où les écarts régionaux sont marqués.

L'hypothèse sous-jacente à cette analyse est que la mise en œuvre de l'APC en Côte d'Ivoire, dans le cadre de la phase pilote, révèle une appropriation différenciée selon les territoires. Ces différences s'expliqueraient notamment par des disparités structurelles touchant les infrastructures, les ressources humaines, ainsi que le degré d'articulation entre les établissements de formation et les acteurs économiques locaux. Ce déséquilibre territorial tendrait à limiter la capacité des établissements situés en zones rurales à répondre aux exigences pédagogiques et organisationnelles de la réforme.

1. Revue de la littérature : l'Approche par les Compétences, une réforme ambitieuse, mais inégalement applicable dans les contextes africains

La diffusion de l'Approche par les Compétences (APC) dans les systèmes éducatifs s'inscrit dans un mouvement de reconfiguration des finalités de l'éducation à l'échelle mondiale, orienté vers l'employabilité, la flexibilité, et l'efficacité (Boutin, 1999 ; Tardif, 2006). Développée initialement dans les pays du Nord comme réponse aux critiques sur l'inadéquation entre formation et emploi, l'APC propose une pédagogie centrée sur l'apprenant, une structuration des programmes autour de situations professionnelles et une évaluation fondée sur des référentiels de performance. Elle marque un éloignement de l'approche par objectifs et des logiques de transmission frontale des savoirs (OIF, 2009 ; Edang Nnang, 2013). Dans le champ de la formation professionnelle, elle repose sur deux piliers fon-

damentaux : l’ancrage des compétences dans des référentiels construits avec les milieux professionnels, et la mise en œuvre d’une pédagogie active qui suppose l’autonomie, la mobilisation de savoirs contextualisés et la résolution de problèmes concrets (Tardif, 2006).

En Afrique subsaharienne, l’introduction de l’APC répond à une double contrainte : moderniser l’appareil éducatif pour répondre aux besoins d’une jeunesse nombreuse et souvent marginalisée du marché de l’emploi, tout en s’arrimant aux exigences des bailleurs et des cadres internationaux de certification (Palé, 2018 ; IPE-UNESCO/IFEF, 2020). Plusieurs pays comme le Sénégal, le Maroc ou le Bénin ont été accompagnés par des programmes multilatéraux pour développer leurs systèmes d’enseignement technique autour de l’APC. Toutefois, les évaluations montrent une marge importante entre le modèle théorique et son implémentation effective. Parmi les obstacles identifiés figurent la difficulté d’adapter les référentiels à des environnements productifs peu structurés, la rareté de formateurs formés à cette pédagogie, et une faible articulation entre l’école et le tissu économique local (Gewer, 2021 ; OIF, 2009). En outre, l’APC tend à reposer sur des prérequis pédagogiques (équipements, encadrement, autonomie professionnelle) rarement réunis dans les contextes africains où les inégalités entre zones rurales et urbaines restent fortes (Edang Nnang, 2013).

Sur le plan conceptuel, plusieurs auteurs insistent sur la nécessité d’analyser les réformes éducatives non pas seulement comme des dispositifs prescriptifs, mais comme des processus sociaux négociés, où les acteurs de terrain jouent un rôle crucial (Derouet & Dutercq, 1997; Berman & McLaughlin, 1977). La théorie de l’adaptation mutuelle, mobilisée notamment par Palé (2018) dans son étude sur la Côte d’Ivoire, montre que les enseignants et les établissements ne se contentent pas d’appliquer

des prescriptions venues d'en haut : ils les traduisent, les réinterprètent ou parfois les contournent selon leurs moyens, leurs cultures professionnelles et les réalités locales. De même, la réussite d'une réforme comme l'APC dépend largement de la gouvernance du changement, du pilotage local, et de l'existence de dispositifs de formation continue, d'accompagnement pédagogique et de soutien institutionnel (Maroy et al., 2022 ; Fullan, 2016). En l'absence de ces conditions, la réforme reste souvent formelle, sans véritable effet sur les pratiques.

Enfin, la question de l'équité dans l'accès à une formation de qualité est centrale dans les analyses critiques de l'APC en Afrique. Si cette approche se veut porteuse d'émancipation et d'autonomisation, elle risque paradoxalement de renforcer les inégalités sociales et territoriales si elle est appliquée de manière uniforme sans tenir compte des écarts de ressources entre établissements (Miletto, 2018 ; Edang Nnang, 2013). La fracture numérique, le manque d'équipement, la rareté des entreprises partenaires en milieu rural, mais aussi l'instabilité des financements ou l'absence de dispositifs d'évaluation fiables affaiblissent l'égalité des chances. Or, l'APC repose précisément sur la confrontation des apprenants à des situations réelles, simulées ou professionnelles – condition rarement remplie dans les zones éloignées ou défavorisées. Cela pose un enjeu majeur de justice sociale et invite à penser des stratégies différenciées d'implantation, qui tiennent compte des inégalités de départ pour ne pas reproduire l'exclusion dans un nouveau langage.

2. Méthodologie : comprendre l'implantation de l'APC à travers les pratiques et les contextes de deux lycées techniques ivoiriens

La présente étude s'inscrit dans une perspective de sociologie compréhensive qui vise à analyser les modalités concrètes de mise en œuvre d'une réforme éducative, en s'attachant aux

expériences, aux perceptions et aux pratiques des acteurs directement impliqués. En s'inscrivant dans les travaux sur la réception des politiques éducatives (Derouet & Dutercq, 1997 ; Bowe & Ball, 2017), elle considère que les réformes ne s'imposent jamais mécaniquement mais sont recontextualisées, voire réinterprétées, selon les ressources disponibles, les contraintes locales et les marges d'autonomie des acteurs. L'étude mobilise aussi la théorie de l'adaptation mutuelle (Berman & McLaughlin, 1977 ; citée par Savoie-Zajc, 1993), qui postule que la réussite ou l'échec d'un changement dépend de la capacité des acteurs de terrain à en faire une lecture située et à en ajuster les principes dans leur cadre d'action. Enfin, l'approche est également sensible aux enjeux d'équité éducative, entendue ici non seulement comme égalité d'accès, mais aussi comme égalité dans les conditions d'apprentissage et les opportunités d'insertion (Miletto, 2018).

L'enquête repose sur un dispositif qualitatif mené dans deux établissements pilotes sélectionnés pour leur situation géographique contrastée et leur rôle dans la phase expérimentale de la réforme APC en Côte d'Ivoire : le Lycée professionnel sectoriel de Yopougon (établissement urbain) et le Lycée professionnel technique d'Odienné (établissement en milieu rural). Le choix de ces deux établissements vise à rendre compte des variations contextuelles dans l'appropriation de la réforme, notamment en ce qui concerne les équipements, les ressources humaines et les partenariats école-entreprise. La population cible comprend d'une part des élèves (au nombre de vingt-quatre) inscrits dans trois filières techniques : Transformation et Contrôle Qualité en Industrie Agroalimentaire, Réfrigération et Conditionnement d'air industriel, Maintenance des Systèmes Industriels et Énergétiques ; d'autre part, neuf enseignants intervenant dans ces filières. Les élèves ont été rencontrés dans le cadre de focus

groupes organisés dans chaque établissement, favorisant la parole collective et le croisement des points de vue. Les enseignants ont fait l'objet d'entretiens semi-directifs individuels, permettant d'explorer leur expérience professionnelle et leur perception des changements induits par l'APC, le tout sous anonymat.

Les thématiques abordées lors de ces entretiens ont été définies à partir des exigences structurelles et pédagogiques de l'APC, telles qu'identifiées dans les guides méthodologiques (OIF, 2009) et dans les référentiels ministériels (METFP, 2016). Trois axes ont ainsi guidé la collecte : la fréquence et la qualité des travaux pratiques, la disponibilité et l'adéquation du matériel didactique, et l'expérience vécue en entreprise (stage, immersion, tutorat). L'analyse des données s'est appuyée sur une analyse thématique de contenu (Mucchielli, 2015), croisant les discours des élèves et des enseignants pour dégager des régularités, des tensions et des points de divergence. Ces analyses ont permis de mettre en perspective la mise en œuvre de l'APC dans les deux établissements autour de trois dimensions transversales : la justice éducative (équité des conditions de formation), la capacité organisationnelle des établissements à gérer la réforme, et le niveau de préparation des enseignants à s'appropriier les nouveaux dispositifs pédagogiques. Ces trois axes nourrissent l'analyse des résultats présentée dans les sections suivantes.

3. Les défis du territoire, de la gouvernance et de la formation selon l'APC

3.1. Quand la même réforme produit des réalités différentes : l'APC confrontée aux inégalités de mise en œuvre

La mise en œuvre de l'Approche par les Compétences (APC) dans les établissements pilotes de Côte d'Ivoire révèle une hétérogénéité marquée des contextes d'application. Alors que le

modèle vise une transformation homogène des pratiques pédagogiques à l'échelle nationale, la réalité de terrain montre que les établissements ne disposent ni des mêmes ressources matérielles, ni des mêmes conditions de pilotage pour intégrer cette réforme. Cette section analyse les écarts structurels observés entre deux établissements engagés dans la phase expérimentale : le Lycée Professionnel Sectoriel (LPS) de Yopougon, en milieu urbain, et le Lycée Professionnel Technique (LPT) d'Odienné, en zone rurale. Le croisement des données recueillies dans ces deux lycées permet de mettre en évidence les tensions entre la norme prescrite et la capacité concrète à la traduire dans l'organisation scolaire, les pratiques pédagogiques et les relations avec le monde du travail.

Au Lycée Professionnel Sectoriel de Yopougon, les conditions d'accueil de la réforme semblent relativement favorables. Les classes comptent un maximum de trente élèves, des équipements de base sont disponibles (vidéoprojecteurs, photocopieurs, tableaux à marqueurs), et les enseignants ont, pour certains, bénéficié de séminaires de formation organisés par l'Institut Pédagogique National de l'Enseignement Technique et Professionnel (IPNETP) ou des programmes de coopération tels que le Contrat de Désendettement et de Développement (C2D). Par contraste, au Lycée Professionnel Technique d'Odienné, l'établissement fait face à des manques criants. En plus d'un déficit en enseignants qualifiés – certaines disciplines comme le français ou les mathématiques ne comptent que deux professeurs pour tous les niveaux – l'établissement souffre de l'absence d'éducateurs, d'un accès limité à l'internet, et d'un équipement didactique très insuffisant. Ce déséquilibre pose un problème fondamental d'équité dans la mise en œuvre d'une réforme qui repose précisément sur la mobilisation de ressources concrètes.

Le problème des équipements est au cœur des témoignages d'élèves et d'enseignants. Au Lycée Professionnel Sectoriel de Yopougon, bien que des difficultés soient relevées – notamment l'absence de bibliothèque ou de salle multimédia – les apprenants bénéficient d'un minimum de supports qui facilitent l'apprentissage : « *On nous montre comment manipuler les machines, comment les nettoyer, comment les éteindre.* » En revanche, à Odienné, le manque de matières d'œuvre empêche la réalisation régulière des travaux pratiques : « *Il faut du matériel pour travailler, sinon on ne fait que la théorie* », rapporte un enseignant. Cette asymétrie est accentuée par le fait que les programmes sont identiques dans les deux établissements, alors même que leurs conditions d'application diffèrent.

L'enjeu de la formation des enseignants apparaît comme une autre variable décisive dans la réussite de l'implantation de l'APC. À Yopougon, les enseignants ont reçu au moins deux formations sur l'APC, même si certains estiment qu'elles sont insuffisantes. Un enseignant déclare : « *Un séminaire de trois jours, ce n'est pas l'APC.* » À Odienné, la situation est plus critique : une partie du personnel actuel n'a jamais été formée, car arrivée après les sessions initiales, et près de 25 personnes formées ont quitté l'établissement. Cela a conduit à une discontinuité des savoirs pédagogiques et à un affaiblissement du collectif éducatif local. En l'absence de renouvellement des formations et d'accompagnement, les enseignants doivent « *improviser* » la réforme sans outils ni encadrement.

Les témoignages d'élèves montrent les conséquences directes de cette situation sur les conditions d'apprentissage. À Yopougon, les élèves expriment un sentiment de participation active : « *On travaille en groupe, on fait des recherches, on comprend par nous-mêmes.* » Cette dynamique correspond aux attendus de l'APC, qui mise sur l'autonomie et l'apprentissage par l'action. À Odienné, ce rapport au savoir est fragilisé. Un élève déclare :

« *On fait beaucoup de cours magistraux. Les travaux pratiques sont rares.* » Ce retour à une pédagogie classique, parfois contrainte, traduit les limites de l'environnement matériel et humain. L'APC reste alors une réforme de surface, peu traduite dans les pratiques quotidiennes.

Le manque de documents pédagogiques constitue un autre point de blocage. Si à Yopougon les référentiels de formation et les guides d'évaluation sont disponibles, à Odienné, certains documents essentiels, comme les guides d'organisation pédagogique et matérielle, n'ont pas été remis aux équipes. Cela crée un flou dans la conduite des séances et alimente un sentiment d'improvisation : « *On travaille sans documents clairs. Chacun fait ce qu'il peut avec ce qu'il a* », confie un enseignant. Cette situation affecte la cohérence des enseignements et affaiblit la possibilité de développer une pédagogie structurée selon les principes de l'APC.

La question budgétaire constitue un frein structurel à la mise en œuvre de la réforme. Le budget alloué au Lycée Professionnel Technique d'Odienné est jugé « *insuffisant au regard des exigences de l'APC* », notamment pour l'achat de matières d'œuvre, l'entretien des machines ou le renouvellement du matériel. Le rapport interne de l'établissement souligne que certains équipements comme le digesteur DJEDAL¹ ou le Chromatographie Liquide Haute Performance² (HPLC) sont indisponibles ou non

¹ Un appareil utilisé pour la digestion des échantillons avant analyse, notamment dans l'industrie agroalimentaire et pharmaceutique. <https://www.raypa.com/fr/equipes-danalyse-alimentaire/digesteur-kjeldahl/>

² Une technique analytique essentielle pour séparer et identifier les composants d'un mélange. Malheureusement, je n'ai pas trouvé de lien spécifique sur le HPLC dans mes recherches, mais tu peux consulter des sites spécialisés en chimie analytique pour plus d'informations.

installés. À Yopougon, même si les besoins sont loin d'être tous satisfaits, un minimum de ressources financières permet de répondre partiellement aux exigences techniques des filières ciblées. Ce déséquilibre contribue à renforcer les écarts entre établissements et à fragiliser la promesse d'un modèle éducatif équitable.

L'insuffisance de la documentation, du matériel et du personnel entraîne une surcharge pour les enseignants. À Odienné, certains doivent assurer plusieurs disciplines ou enseigner à plusieurs niveaux en parallèle (BT2, BT3, BTS1 et BTS2), ce qui compromet leur disponibilité pédagogique. Un enseignant confie : « *Je suis à 30 heures de cours par semaine, parfois sans pause.* » Cette surcharge se traduit par des pratiques d'enseignement plus traditionnelles, un moindre suivi individualisé et une réduction du temps consacré à l'accompagnement des projets pratiques. À Yopougon, la situation est plus équilibrée, permettant la mise en place d'équipes pédagogiques, la mutualisation des ressources et la cohésion du collectif éducatif.

Ces écarts matériels et humains ont un impact direct sur l'expérience des élèves et leur perception de la qualité de la formation. Les apprenants du Lycée Professionnel Sectoriel de Yopougon se disent globalement satisfaits : « *Ici, c'est la pratique. On peut même s'installer après.* » Ceux du Lycée Professionnel Technique d'Odienné expriment davantage d'incertitude : « *On voit pas vraiment à quoi ça va nous servir si on ne touche pas aux machines.* » Ces représentations différenciées révèlent que l'APC ne produit pas les mêmes effets selon le territoire dans lequel elle est mise en œuvre. Ce constat met en lumière une réforme à deux vitesses, où l'inégalité des conditions d'implémentation

vient fragiliser l'un des principes fondateurs de l'APC : la construction de compétences transférables dans tous les contextes.

En somme, les résultats montrent que la réussite de l'APC ne dépend pas seulement de l'adhésion des enseignants ou de la motivation des élèves, mais surtout de la disponibilité de ressources pédagogiques, humaines et matérielles adaptées aux exigences du modèle. Les écarts observés entre Yopougon et Odienné ne relèvent pas d'un déficit d'implication des acteurs, mais bien d'une inégalité structurelle qui compromet l'équité dans l'accès à une formation de qualité. Cette première section met ainsi en évidence l'un des paradoxes de la réforme : bien qu'elle vise à moderniser l'enseignement technique et à favoriser l'insertion professionnelle, elle risque de reproduire, voire d'accentuer, les déséquilibres territoriaux existants. Cela appelle à repenser les conditions concrètes de mise en œuvre, en tenant compte des réalités spécifiques à chaque territoire.

3.2. La gestion locale, levier négligé mais décisif pour la mise en œuvre de l'APC

La réussite d'une réforme pédagogique ne repose pas uniquement sur les contenus ou les intentions ministérielles, mais aussi – et peut-être surtout – sur les capacités locales des établissements à la traduire en pratiques effectives. Dans le cas de l'APC en Côte d'Ivoire, la gestion des établissements s'est révélée être un maillon déterminant, mais fragile, du processus d'implantation. L'autonomie relative des directions, leur capacité à mobiliser des ressources matérielles, humaines et institutionnelles, ainsi que leur posture de pilotage pédagogique, influencent directement la qualité de mise en œuvre de la réforme. Cette section propose d'explorer les logiques différenciées de gestion observées dans les deux lycées pilotes – le Lycée Professionnel Sectoriel de Yopougon et le Lycée Profes-

sionnel Technique d'Odienné – afin de mieux comprendre comment les contraintes de gestion structurent les écarts entre la réforme prescrite et la réalité vécue.

Au Lycée Professionnel Sectoriel de Yopougon, l'organisation pédagogique et administrative semble relativement structurée. Le rapport interne mentionne la constitution d'équipes pédagogiques animées par le chef d'établissement, favorisant un travail en synergie entre les enseignants. Cette dynamique collective permet une meilleure appropriation des référentiels de formation, et surtout une cohérence dans l'application de l'APC, malgré les difficultés logistiques rencontrées. La mise en place d'une structure d'encadrement pédagogique active facilite également la coordination entre les différents niveaux d'enseignement et les filières. Cette capacité organisationnelle permet de répondre, au moins partiellement, aux exigences de la pédagogie par compétences, qui nécessite planification, suivi individualisé, et évaluation par compétences.

À l'inverse, au Lycée Professionnel Technique d'Odienné, le pilotage de l'établissement est fragilisé par plusieurs facteurs structurels. Le départ de cadres formés (un directeur, un SERFE, plusieurs éducateurs et enseignants), combiné à l'arrivée d'un personnel non formé à l'APC, a rompu la continuité de gestion et affaibli le capital organisationnel local. En l'absence de formation renouvelée, le personnel en poste se trouve contraint de « *naviguer à vue* », sans référents solides pour piloter la réforme. Ce déficit de formation interne est aggravé par une absence d'accompagnement institutionnel régulier, ce qui isole encore davantage l'établissement dans son effort de mise en œuvre. La gestion du quotidien repose alors sur des logiques de débrouille, éloignées des standards visés par l'APC.

Un autre enjeu de gestion important est celui de l'allocation des ressources humaines. Au Lycée Professionnel Sectoriel de Yopougon, l'effectif enseignant reste relativement stable, et bien que des lacunes soient mentionnées, l'établissement dispose d'un vivier de formateurs partiellement formés, ce qui permet d'assurer une certaine continuité pédagogique. À Odienné, la situation est bien plus critique : la pénurie d'enseignants dans des disciplines clés (français, mathématiques, économie, informatique) impose à ceux en poste de couvrir plusieurs niveaux simultanément, de BT2 à BTS2. Cette surcharge de travail désorganise la gestion des plannings, affaiblit la qualité de l'enseignement et empêche la planification rigoureuse exigée par l'APC. La gestion des emplois du temps devient alors un exercice de compensation permanente, au détriment de la stabilité pédagogique.

La capacité à mobiliser des ressources financières et matérielles pour répondre aux exigences de l'APC est également un critère essentiel dans la gestion de la réforme. Le Lycée Professionnel Sectoriel de Yopougon, bien que confronté à des contraintes budgétaires, semble mieux armé pour faire face à la demande croissante de matières d'œuvre et d'équipements didactiques. À l'inverse, le Lycée Professionnel Technique d'Odienné alerte sur l'insuffisance chronique de son budget, incapable de couvrir les besoins de maintenance des équipements ou d'acheter les intrants nécessaires aux travaux pratiques. Dans un tel contexte, la direction de l'établissement se retrouve dans l'incapacité de planifier les séances pratiques, ce qui compromet l'un des fondements de l'APC : l'apprentissage en situation réelle.

La relation entre l'établissement et son environnement socio-économique constitue un autre facteur de différenciation dans la gestion de la réforme. Le Lycée Professionnel Sectoriel de

Yopougon bénéficie d'une proximité avec des zones industrielles, ce qui facilite les partenariats ponctuels avec les entreprises, l'organisation de stages et, dans une certaine mesure, la co-construction de projets pédagogiques. À Odienné, l'éloignement géographique et l'absence d'un tissu économique dynamique limitent fortement cette possibilité. La direction du Lycée Professionnel Technique peine à établir des relations fonctionnelles avec des entreprises locales, faute d'acteurs disponibles ou équipés. Ce déficit d'ouverture vers le monde professionnel réduit l'efficacité de l'alternance, pourtant centrale dans l'architecture de l'APC.

Les processus de pilotage pédagogique révèlent aussi des logiques différenciées selon les établissements. À Yopougon, l'existence d'une chaîne de commandement claire, appuyée par une animation pédagogique structurée, permet une certaine cohérence dans l'implantation de l'APC. Les réunions pédagogiques régulières, la planification des évaluations de compétence et l'accompagnement des enseignants sont assurés, même si des ajustements restent nécessaires. À Odienné, ces mécanismes sont plus incertains. L'absence de référentiels opérationnels, de plan de formation interne, ou encore d'espaces d'échange entre enseignants empêche la structuration d'une gestion pédagogique propre à la réforme. Ce déficit d'organisation aggrave la dispersion des pratiques et freine toute dynamique collective de changement.

Un élément récurrent dans les entretiens est le sentiment d'abandon institutionnel ressenti par les chefs d'établissement et les enseignants, notamment au Lycée Professionnel Technique d'Odienné. L'absence de suivi régulier de la part des inspecteurs, le retard dans la réception des documents officiels, ou encore les silences administratifs sur les demandes de moyens techniques renforcent une impression de solitude face à la réforme : « *L'inspection générale, il n'y a pas de suivi en fait.* » Ce

sentiment pèse lourdement sur la motivation des équipes et leur capacité à impulser une dynamique collective. À Yopougon, ce ressenti est moins présent, même si les attentes d'un accompagnement plus soutenu sont également exprimées.

La gestion des temporalités scolaires représente un autre défi majeur. La programmation modulaire des compétences, caractéristique de l'APC, suppose une planification fine et un suivi continu de la progression des élèves. Or, dans les deux établissements, mais plus encore à Odienné, l'inscription tardive des élèves, la densité des programmes à réaliser en une année, et la difficulté de programmer des séances de remédiation perturbent fortement la gestion du temps scolaire. Le chef d'établissement se trouve souvent contraint de privilégier des choix administratifs aux dépens de la logique pédagogique, ce qui réduit l'impact de la réforme et fragilise les conditions d'apprentissage.

En définitive, l'analyse comparée des deux établissements met en évidence que la qualité de la gestion locale est un facteur clé dans la réussite de la réforme APC. Tandis que le Lycée Professionnel Sectoriel de Yopougon parvient, malgré ses limites, à structurer son organisation autour des exigences de l'APC, le Lycée Professionnel Technique d'Odienné, confronté à de multiples fragilités (pénurie de personnel, déficit budgétaire, absence d'accompagnement), peine à faire vivre les principes de la réforme. Cette situation confirme qu'au-delà des discours normatifs et des cadres réglementaires, la réussite d'une réforme pédagogique repose sur des conditions concrètes d'organisation, de pilotage et de coordination, qui doivent être pensées localement et soutenues par des mécanismes institutionnels solides.

3.3. Sans enseignants formés, l'APC reste une réforme incomplète et inégalement appropriée

Dans le cadre de la réforme de l'enseignement technique et professionnel en Côte d'Ivoire, la formation des formateurs constitue l'un des leviers les plus stratégiques – mais aussi les plus problématiques – de la mise en œuvre de l'Approche par les Compétences (APC). Loin de se limiter à une révision des programmes ou à l'introduction de nouveaux référentiels, l'APC exige une transformation en profondeur des pratiques pédagogiques, des modes d'évaluation et du positionnement même des enseignants dans la relation éducative. L'enseignant, traditionnellement perçu comme le détenteur du savoir, devient avec l'APC un facilitateur d'apprentissage, un guide qui accompagne l'élève dans la mobilisation autonome de ses compétences. Or, cette mutation professionnelle suppose un investissement fort en formation initiale et continue, ce qui, comme le montrent les enquêtes de terrain, est loin d'être effectif dans les établissements pilotes.

L'étude menée au Lycée Professionnel Sectoriel (LPS) de Yopougon et au Lycée Professionnel Technique (LPT) d'Odienné met en évidence des écarts notables dans l'accès et la qualité de la formation reçue par les enseignants. À Yopougon, plusieurs enseignants ont pu bénéficier de formations ponctuelles organisées par l'Institut Pédagogique National de l'Enseignement Technique et Professionnel (IPNETP) ou dans le cadre de projets de coopération bilatérale. Cependant, ces formations sont souvent jugées superficielles : « *Un séminaire de trois jours, ce n'est pas l'APC* », affirme un enseignant. À Odienné, la situation est encore plus critique : plusieurs formateurs actuellement en poste n'ont reçu qu'une simple sensibilisation à l'APC, souvent informelle, et un grand nombre de ceux qui avaient été formés lors du démarrage de l'expérimentation ont depuis quitté l'établissement. Ce turnover du personnel ensei-

gnant fragilise la continuité pédagogique et entraîne une perte de capital professionnel au sein de l'établissement.

Ces carences sont d'autant plus problématiques que l'APC repose sur une pédagogie de projet, de l'alternance, de la modularisation et de l'évaluation formative, autant d'éléments qui demandent une compréhension fine et une maîtrise technique spécifique. L'enquête fait ressortir que de nombreux enseignants continuent d'appliquer des pratiques d'enseignement frontal, héritées du modèle transmissif, faute de formation adéquate pour s'approprier les outils de l'APC. *« On a fait beaucoup de séminaires, mais on n'est jamais rentré en classe »*, rapporte un formateur, soulignant le décalage entre les discours institutionnels et la réalité de terrain. En l'absence de formations pratiques contextualisées, les enseignants se retrouvent seuls face à une réforme complexe, qu'ils doivent mettre en œuvre sans accompagnement opérationnel.

La nature même des formations pose problème. Dans les deux établissements, les enseignants interrogés regrettent le caractère trop théorique et peu interactif des sessions auxquelles ils ont participé. Aucune formation d'envergure n'a permis, par exemple, de simuler des séquences APC, de créer collectivement des grilles d'évaluation par compétence, ou d'observer des classes modèles. La plupart des formateurs affirment avoir reçu des présentations descendantes, souvent limitées à la lecture de documents ou à la transmission de consignes générales. Ce mode de formation ne permet ni l'appropriation progressive des outils pédagogiques, ni le développement d'une communauté professionnelle autour de la réforme. Il en résulte un sentiment d'incompréhension, voire de frustration, chez les enseignants, qui déclarent ne pas toujours savoir ce que l'on attend exactement d'eux.

L'autre point saillant de l'enquête concerne l'absence de formation continue structurée, perçue comme une lacune majeure. Plusieurs enseignants indiquent qu'aucun suivi n'a été organisé après les premières sessions de sensibilisation. Or, dans une réforme pédagogique de cette ampleur, la formation ne peut se résumer à une initiation ponctuelle : elle doit être pensée comme un processus long, itératif, soutenu par des retours d'expérience, des évaluations formatives et des dispositifs d'accompagnement régulier (Paquay et al., 2001). Sans cela, l'appropriation de l'APC reste partielle, déséquilibrée et souvent inégale d'un enseignant à l'autre. À Odienné, certains enseignants affirment improviser en s'appuyant sur leurs expériences passées ou sur des documents partagés de manière informelle, souvent inadaptés ou incomplets.

Un autre facteur d'inquiétude souligné dans les deux établissements est l'absence de référentiels à jour. Dans plusieurs cas, les enseignants déclarent ne pas avoir reçu les documents officiels de la réforme, ou disposer de versions incomplètes, mal contextualisées ou non harmonisées avec les besoins du terrain. « *On nous demande de faire de l'APC mais on n'a pas les référentiels* », dit l'un d'eux. Cette absence de supports normés rend la mise en œuvre très aléatoire et renforce le sentiment d'improvisation, voire d'abandon. Elle montre aussi que la formation des enseignants ne peut être découplée d'une logistique documentaire et institutionnelle solide : des outils, des temps de préparation, et des espaces d'échange doivent être prévus pour soutenir cette mutation professionnelle.

Au-delà des contenus de formation, c'est aussi le dispositif institutionnel de professionnalisation qui est en cause. Le modèle APC, tel qu'implémenté, ne semble pas s'inscrire dans une stratégie nationale claire de développement professionnel des enseignants de l'Enseignement Technique et de la Formation Professionnelle (ETFP). Le manque de coordination entre le

Ministère de l'Enseignement Technique de la Formation Professionnelle et de l'apprentissage (METFPA), l'Institut Pédagogique National de l'Enseignement Technique et Professionnel (IPNETP), les inspections pédagogiques et les établissements affaiblit la cohérence de l'action publique. La réforme semble être perçue comme une injonction descendante, sans articulation avec les besoins exprimés par les acteurs de terrain. Cette dissociation entre le prescrit et le vécu bloque la dynamique d'appropriation : au lieu de générer de l'adhésion, la réforme crée de la distance, voire de la défiance. La formation devient alors une variable d'ajustement, plutôt qu'un levier stratégique de transformation.

Dans ce contexte, les enseignants développent des stratégies individuelles d'adaptation, parfois pertinentes, mais souvent isolées. Certains s'appuient sur leurs collègues, d'autres s'organisent en groupes de partage de ressources via des canaux numériques (WhatsApp, Google Drive), mais sans cadre formel de mutualisation. Ces pratiques révèlent une volonté réelle d'innovation, mais aussi une absence de structuration institutionnelle pour accompagner ces efforts. L'État laisse ici les établissements et les enseignants inventer localement des solutions, sans reconnaissance ni soutien. Cela entretient une dynamique de précarité professionnelle qui affaiblit la réforme et creuse les inégalités entre les établissements disposant de réseaux et ceux qui en sont dépourvus.

Face à ces constats, plusieurs enseignants formulent des propositions concrètes notamment la création de cellules pédagogiques internes, la mise en place de formations modulaires étalées dans le temps, des visites d'observation croisée entre établissements, ou encore l'implication plus forte des entreprises dans la formation pédagogique des enseignants. Ces suggestions montrent qu'il existe un potentiel d'amélioration

significatif, à condition que la formation soit reconnue comme un investissement structurant et non comme un supplément. La réforme de l'APC pourrait ainsi devenir un vecteur de professionnalisation, à condition d'en faire un projet partagé, accompagné, et valorisé.

En somme, la formation des enseignants à l'APC, dans sa configuration actuelle, apparaît inachevée, inégale et insuffisamment pilotée. Loin d'être un simple problème technique, cette situation met en péril les fondements mêmes de la réforme. Elle montre que la qualité de l'enseignement ne repose pas uniquement sur les référentiels ou les équipements, mais d'abord sur les hommes et les femmes chargés de transmettre les compétences. Sans un effort massif de formation continue, une stratégie nationale de professionnalisation, et un appui régulier aux enseignants, l'APC risque de devenir une réforme formelle, appliquée à minima ou déformée dans ses principes. C'est donc à travers la valorisation du métier d'enseignant et l'accompagnement durable des pratiques que se joue l'avenir de cette réforme éducative.

4. Discussion : l'APC ne prend sens qu'à l'épreuve des contextes, des ressources et des acteurs

Les constats issus de cette étude confirment que la mise en œuvre de l'Approche par les Compétences (APC) repose moins sur l'adhésion formelle aux principes de la réforme que sur la capacité des établissements à articuler le prescrit institutionnel avec leurs ressources locales. Ce que les terrains de Yopougon et d'Odienné donnent à voir, c'est une réforme dont l'application dépend fortement de l'environnement matériel, humain et organisationnel dans lequel elle s'insère. Comme l'ont souligné Berman et McLaughlin (1977), toute réforme éducative est le produit d'une négociation entre des normes centrales et des contextes d'application. Dans le cas ivoirien, on

observe une implémentation contrastée : relativement structurée à Yopougon, largement contrainte à Odienné. Cela invite à nuancer l'idée d'une APC homogène et à interroger ce que cette hétérogénéité produit en termes d'accès à une formation de qualité.

L'étude révèle également que les enseignants ne rejettent pas la réforme en elle-même, mais qu'ils peinent à la mettre en œuvre dans des conditions qu'ils n'ont ni choisies, ni accompagnées. Ce phénomène n'est pas nouveau. Derouet & Dutercq (1997) le décrit bien lorsqu'il souligne que les réformes descendantes, si elles ne s'ancrent pas dans les pratiques professionnelles, génèrent incompréhension, voire résistance passive. Ici, le problème n'est pas de l'ordre du refus, mais plutôt de l'absence de cadre pour faire vivre la réforme : des formations peu approfondies, des documents techniques parfois absents, et un accompagnement pédagogique insuffisant. Dans une commune comme Odienné, où les ressources sont limitées, la réforme prend la forme d'une injonction sans levier. À l'inverse, l'exemple de Yopougon montre que lorsqu'un minimum de pilotage local existe, une appropriation – même partielle – devient envisageable. Cela renforce l'idée, défendue par Paquay et al. (2001), que le changement passe d'abord par la structuration de collectifs professionnels autour d'un projet partagé.

Ce décalage entre intentions et conditions est renforcé par la nature même de l'APC. Les travaux de Boutin (1999) et Tardif (2006) insistent sur l'exigence matérielle et pédagogique de ce modèle : il suppose des équipements spécialisés, un accès à des ateliers modernes, des référentiels construits avec les entreprises, et une pédagogie active qui se déploie sur la base de cas réels. En l'absence de tout cela, on assiste à une forme de ritualisation du discours sans transformation des pratiques. À Odienné, les enseignants en sont réduits à faire de la théorie,

faute de matériel, et les élèves s'interrogent sur le sens de leur formation. Cette situation fait écho à ce que Edang Nnang (2013) appelait « l'APC importée » : un modèle conçu dans d'autres contextes, mais transplanté sans adaptation suffisante aux réalités locales. Pourtant, la réforme est encore jeune, et des investissements récents – comme l'annonce de sept nouveaux établissements équipés de matériel de dernière génération dès janvier 2025 (CICG, 2024) – montrent que le gouvernement semble prendre la mesure de cet enjeu structurel.

Sur la question de la formation des formateurs, le contraste entre le discours institutionnel et la réalité est particulièrement saisissant. L'OIF (2009) et Gewer (2021) insistent sur l'importance de dispositifs de formation continue, contextualisés, adossés à l'observation de pratiques et à la co-construction pédagogique. Pourtant, les données de terrain montrent que les formations organisées jusqu'ici sont restées ponctuelles, descendantes et peu interactives. Les enseignants, livrés à eux-mêmes, bricolent tant bien que mal avec des documents incomplets, souvent sans cadre de référence clair. Cela produit une réforme qui, sur le papier, promeut la professionnalisation, mais qui dans les faits fragilise les enseignants en les exposant à des attentes qu'ils n'ont pas les moyens de satisfaire. La formation devient alors une variable négligée, alors qu'elle devrait être un point d'appui structurant.

L'un des apports majeurs de cette étude est d'avoir interrogé la réforme à partir de la notion d'équité territoriale. Cette approche, encore peu explorée dans les travaux sur l'APC, montre que l'universalité du modèle ne garantit pas l'égalité des effets. Miletto (2018) l'avait déjà montré à propos des politiques éducatives françaises : les dispositifs les plus ambitieux peuvent creuser les inégalités s'ils ne tiennent pas compte des disparités de départ. À Odienné, les conditions d'enseignement ne permettent pas aux élèves de vivre la même expérience pédago-

gique qu'à Yopougon. Dès lors, l'APC, censée rendre les élèves autonomes, compétents et employables, devient paradoxalement un facteur de différenciation. Cela renforce la nécessité d'un pilotage différencié, c'est-à-dire d'un appui spécifique aux territoires les plus défavorisés, à la fois en matière de ressources, d'ingénierie pédagogique, et de coopération avec les acteurs économiques.

Enfin, cette étude montre l'intérêt de sortir des approches purement normatives ou statistiques pour saisir la dynamique réelle d'une réforme. En mobilisant une méthodologie qualitative comparative, elle rejoint les travaux de Bowe et Ball (2017) sur les politiques éducatives comme pratiques situées. Elle permet de redonner leur place aux acteurs de terrain – enseignants, élèves, encadreurs – et de voir comment la réforme est effectivement traduite, ajustée, parfois détournée. En cela, cette recherche ne se contente pas d'illustrer des connaissances existantes : elle les recontextualise dans un espace ivoirien spécifique, à un moment où de nouveaux établissements voient le jour, où des investissements sont annoncés, mais où les logiques professionnelles et les contraintes locales restent les vraies clés de compréhension des politiques éducatives.

Conclusion

L'analyse de la phase pilote de l'implantation de l'Approche par les Compétences (APC) dans l'enseignement technique et la formation professionnelle en Côte d'Ivoire révèle un écart significatif entre les ambitions affichées et les conditions réelles de mise en œuvre. En croisant deux établissements pilotes aux contextes contrastés – le Lycée Professionnel Sectoriel de

Yopougon et le Lycée Professionnel Technique d'Odienné – cette étude montre que la réforme se déploie de manière inégale, tant sur le plan des ressources disponibles que des pratiques pédagogiques. Elle met en lumière des tensions entre l'univers normatif de la réforme et la matérialité des conditions éducatives. Ce constat rejoint les travaux de Berman et McLaughlin (1977), pour qui toute réforme doit être analysée comme un processus d'appropriation situé, dépendant fortement des dynamiques locales. À ce titre, la réussite de l'APC ne peut être envisagée sans une lecture fine des contextes territoriaux et des marges de manœuvre des acteurs éducatifs.

Les résultats soulignent en particulier trois fragilités structurelles : l'inégalité d'accès aux équipements et aux ressources pédagogiques, la faiblesse des mécanismes de gestion et de pilotage des établissements, et l'insuffisance de la formation des enseignants. Ces trois dimensions, étroitement imbriquées, conditionnent fortement la mise en œuvre effective de l'APC. Comme l'ont montré Boutin (1999) et Tardif (2006), ce modèle repose sur une pédagogie active, exigeante en matériel et en ingénierie didactique. Or, dans des environnements sous-dotés, comme à Odienné, cette ambition se heurte à la réalité du terrain. La réforme devient alors une norme formelle, parfois réduite à un discours institutionnel, sans prise réelle sur les pratiques. Cela soulève une question essentielle pour les décideurs publics : peut-on réformer sans investir durablement dans les conditions d'exercice des enseignants et dans les outils de pilotage pédagogique ?

Au-delà de ses apports académiques, cette étude offre des enseignements concrets pour les politiques publiques. Elle invite à penser la réforme non pas comme un modèle uniforme à déployer, mais comme un dispositif à adapter, en fonction des réalités socio-territoriales. Elle rejoint en cela les analyses de Miletto (2018), qui montrent que les politiques éducatives ont

souvent des effets différenciés, selon les territoires dans lesquels elles s'inscrivent. La récente annonce par le Ministère de l'Enseignement Technique, de la Formation Professionnelle et de l'Apprentissage (METFPA) de l'ouverture de sept nouveaux établissements à partir de janvier 2025 (CICG, 2024) est un signal encourageant. Elle montre que l'État ivoirien prend conscience de l'importance de l'investissement structurel pour faire vivre sa réforme. Toutefois, ces efforts devront s'accompagner d'une attention particulière portée à la gouvernance des établissements, à la formation continue des enseignants, et à la coordination avec les acteurs économiques, sans quoi le risque d'un modèle à deux vitesses persistera.

En outre, les résultats de cette étude confirment l'hypothèse initiale selon laquelle la mise en œuvre de l'APC en Côte d'Ivoire se traduit par une appropriation différenciée selon les territoires. L'analyse comparée des deux établissements pilotes met en évidence que cette hétérogénéité s'explique par des disparités structurelles profondes : inégalités d'équipement, instabilité des ressources humaines, et faible articulation avec le tissu économique local. Ces facteurs combinés limitent la capacité des établissements situés en zones rurales à répondre aux exigences pédagogiques et organisationnelles de la réforme. Loin d'être anecdotiques, ces écarts traduisent un risque de reproduction, voire d'aggravation, des inégalités éducatives que la réforme prétend pourtant combattre. Dès lors, une mise en œuvre plus équitable de l'APC suppose un pilotage différencié, un soutien renforcé aux territoires les plus fragiles, et une stratégie de formation continue réellement arrimée aux besoins du terrain.

En définitive, cette recherche plaide pour une reformulation pragmatique de l'APC, fondée sur l'écoute des acteurs de terrain, l'ajustement des dispositifs en fonction des contraintes

locales, et l'institutionnalisation de mécanismes de soutien à moyen et long terme. Elle démontre que les réformes éducatives, pour être efficaces, doivent articuler vision politique, investissement matériel, et accompagnement humain. Par son ancrage empirique et son approche comparative, cette étude contribue à une meilleure compréhension des défis de l'APC dans les pays en développement, et ouvre des perspectives pour une mise en œuvre plus équitable et plus réaliste des politiques éducatives. Elle s'inscrit dans une sociologie de l'éducation et de l'action publique attentive aux logiques de traduction, d'appropriation et de différenciation, et constitue une base utile pour repenser la formation professionnelle comme un levier d'insertion durable et de justice sociale.

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Les rites funéraires baoulé à l'épreuve du christianisme

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Résumé

À l'intersection de l'anthropologie de la religion, et de la mort notamment les travaux sur les dynamiques des rites funéraires en contexte africain, cet article explore les transformations des pratiques funéraires chez les Baoulé de Côte d'Ivoire sous l'effet du christianisme. Fondée sur une enquête qualitative auprès de six personnes issues de trois sous-groupes baoulé (en milieu urbain et rural), l'étude interroge l'impact des prescriptions chrétiennes sur les conceptions du salut, les logiques rituelles et la gestion sociale de la mort.

Les résultats révèlent que l'introduction du christianisme ne produit pas une rupture frontale avec la tradition, mais une série d'ajustements par déplacements symboliques, délégations rituelles ou reformulations doctrinales. Au lieu de percevoir une contradiction entre foi chrétienne et appartenance coutumière, les acteurs construisent une continuité entre ancestralité et eschatologie chrétienne. En retour, certaines Églises intègrent les imaginaires locaux autour de la sorcellerie comme cause de la mort, proposant des protections spirituelles qui prolongent la fonction prophylactique des rites anciens.

Ce double mouvement – recomposition des rituels traditionnels et traditionnalisation du christianisme – met en lumière le rôle actif des individus dans l'agencement de plusieurs univers de sens. Les funérailles apparaissent ainsi comme un espace d'expression où se redéfinit, dans la continuité et non la rupture, l'articulation entre mémoire lignagère et croyance chrétienne.

Mots-clés : ancestralité, Baoulé, christianisme, recomposition rituelle, rites funéraires

Baoulé Funerary Rites Confronted with Christianity

Abstract

At the intersection of the anthropology of religion, theories of rites of passage, and recent studies on ritual transformations in African contexts, this article examines the evolving funeral practices among the Baoulé of Côte d'Ivoire under the influence of Christianity. Based on a qualitative investigation involving six individuals from three Baoulé subgroups – both rural and urban – the study explores how Christian prescriptions reshape notions of salvation, ritual logics, and the social management of death.

Findings reveal that the adoption of Christianity does not result in a radical rupture with traditional customs but instead leads to a range of adjustments through symbolic displacement, ritual delegation, or doctrinal reconfiguration. Rather than perceiving an inherent contradiction between Christian faith and customary belonging, actors create a lived continuity between ancestral spirituality and Christian eschatology. In return, certain churches integrate local imaginaries of witchcraft as a cause of death, offering spiritual protections that prolong the prophylactic function of earlier rites.

This two-way dynamic – ritual recomposition and the “traditionalization” of Christianity – highlights the active role of individuals in articulating multiple symbolic registers. Funerals thus emerge as a privileged space for the redefinition of identity, where ancestral memory and Christian belief intersect not in rupture but through negotiated continuity.

Keywords: *ancestrality Funeral rites, Baoulé, Christianity, Ritual recomposition,*

Introduction

Dans les sociétés africaines, les rites funéraires occupent une place centrale dans la gestion du rapport entre les vivants et les morts (Kouassi, 2005). Ils permettent de rendre hommage au défunt, de réguler les tensions sociales, de réaffirmer les hiérarchies et de rétablir les équilibres spirituels (Noret, 2017). La mort, dans ces contextes, ne constitue pas qu'un simple fait biologique ; elle est vécue comme une rupture symbolique, qui appelle une prise en charge rituelle élaborée (Fortes, 1987). Cette prise en charge participe d'un ordre cosmique et social dans lequel l'individu, le lignage et la communauté sont étroitement liés (Rosny, 1981). En ce sens, les funérailles africaines doivent être abordées comme des événements totaux (Mauss, 1925), où se rejouent les logiques sociales, politiques et religieuses de la société.

Parmi les Baoulé, peuple akan du centre de la Côte d'Ivoire, les pratiques funéraires sont marquées par une structuration ancienne et complexe. Chaque étape du rite (préparation du corps, veillée, inhumation, clôture du deuil) renvoie à des systèmes de représentations spécifiques. Le cadavre, dans cet univers symbolique, n'est pas une simple dépouille : il est un support de transition, de médiation, et même d'autorité posthume, car seul un traitement rituel conforme peut assurer au défunt l'accès au statut d'ancêtre (M'mien) – garant de protection pour les vivants (Koffi, 2015 ; N'Guessan, 2010). Cette organisation rituelle, longtemps transmise par les anciens, repose sur une vision intégrée du monde et du vivant.

Or, cette structuration est aujourd'hui selon plusieurs études, confrontée à de nombreuses transformations (Noret, 2005 ; Vidal, 1986 ; Jindra & Noret, 2022 ; Kouakou, 2005 ; Elias, 1987 ; Kaufmann, 1996). L'urbanisation, la scolarisation,

l'ouverture aux médias et les mutations socio-économiques ont toutes contribué à modifier les modalités pratiques des funérailles. Mais parmi ces facteurs, l'un d'eux apparaît particulièrement déterminant : l'essor du christianisme, dans ses différentes variantes – catholique, évangélique, pentecôtiste ou charismatique (Noret, 2014). Ces formes religieuses, en introduisant de nouvelles logiques de salut, de jugement post-mortem, et de rapport au corps du défunt, semblent remettre en question les fondements des pratiques rituelles traditionnelles (de Witte, 2001 ; Engelke, 2007).

Selon les résultats du dernier Recensement Général de la Population et de l'Habitat (RGPH 2021), publiés par l'Institut National de la Statistique (INS), la population chrétienne représente 44,5 % de l'ensemble des habitants de la Côte d'Ivoire, contre 37,2 % de musulmans et 6,7 % d'adeptes des religions traditionnelles africaines. Ces données permettent de constater que le pays, dans sa quasi-totalité adhère à l'une de ces religions monothéistes dites révélées, au point où l'on pourrait raisonnablement s'interroger sur la place qu'il reste aux coutumes antérieures.

Dès lors, le choix de centrer cette étude sur l'effet du christianisme sur les rites funéraires baoulé, se justifie, d'une part, par le poids démographique de ce groupe au sein de la population nationale, et, d'autre part, par une réalité largement observée sur le terrain et confirmée dans plusieurs travaux : les Baoulé, connus pour être majoritairement animistes, sont aujourd'hui largement affiliés à des confessions chrétiennes, notamment catholique et évangélique. Cette orientation religieuse, bien que rarement chiffrée de manière désagrégée, constitue un fait sociologique observable, notamment en milieu rural et urbain (Kouamé, 2012).

Dans ce contexte, il devient pertinent de s'interroger sur l'effet propre de cette christianisation sur les rites funéraires

baoulé. En d'autres termes : Comment les prescriptions chrétiennes influencent-elles le devenir eschatologique du défunt ? Quelles tensions rituelles émergent autour de l'organisation des funérailles entre prescriptions ecclésiales et normes ancestrales ? Et, que deviennent les représentations traditionnelles de la mort, dans un espace funéraire baoulé qui tend à se christianiser ?

1. Du pouvoir rituel de la mort à l'effet religieux sur les funérailles

Les travaux classiques en anthropologie de la mort ont montré que les rites funéraires, dans les sociétés africaines, ne relèvent pas seulement de l'ordre symbolique : ils participent à la régulation sociale, au maintien des hiérarchies, et à la reproduction de l'ordre cosmologique (Van Gennep, 1909 ; Hertz, 1905 ; Fortes, 1987). La mort y est un moment critique de désorganisation du groupe, que seule une ritualisation codifiée permet de traverser. Dans ce cadre, le défunt apparaît comme un acteur en devenir, susceptible d'accéder au statut d'ancêtre, à condition que les rites appropriés soient accomplis (Kouassi, 2005 ; Rosny, 1981). Cette conception d'une mort active, où le cadavre est une interface entre mondes visibles et invisibles, constitue un socle partagé dans de nombreuses sociétés d'Afrique subsaharienne.

À partir des années 1980, la recherche s'est déplacée vers les processus de transformation de ces rites, sous l'effet conjugué de l'urbanisation, de la scolarisation et de l'émergence de nouveaux registres religieux. Les funérailles sont alors décrites comme des scènes de reconfiguration des appartenances, où s'entremêlent enjeux de classe, tensions générationnelles, et conflits de légitimité (Vidal, 1986 ; Agier, 2015 ; Noret, 2017). Dans cette perspective, Joël Noret et Michael Jindra (2022) par-

lent de « pluralité rituelle », pour désigner l'accumulation ou la coexistence de logiques funéraires concurrentes dans un même espace cérémoniel. Au lieu de constituer un chaos, cette pluralité est organisée, située, et souvent négociée par les acteurs.

Mais cette transformation ne peut être saisie sans prêter attention à l'impact spécifique des religions monothéistes – notamment le christianisme et l'islam – sur les représentations et les pratiques funéraires. Ces religions, en valorisant un salut individuel, indépendamment des prescriptions ancestrales, introduisent un nouveau régime de sens (Engelke, 2007 ; Meyer, 2019). Elles déplacent les finalités du rite : là où la tradition visait l'intégration du défunt dans la communauté des ancêtres, les doctrines chrétiennes, en particulier, proposent un au-delà désincarné, universel, dépendant de la foi plutôt que de la lignée.

Plusieurs travaux ont mis en évidence ces effets de recomposition dans des contextes variés. Marleen de Witte (2001), à propos des Asante du Ghana, montre comment les Églises pentecôtistes tendent à supplanter ou refréner les pratiques coutumières, tout en tolérant des arrangements tactiques. Elle évoque notamment l'émergence de rites mixtes, les conflits intergénérationnels autour de la place du cadavre, et les tensions entre familles et institutions religieuses. Joël Noret (2014), dans une enquête menée au Bénin, souligne comment l'Église catholique a cherché à imposer une exclusivité rituelle, interdisant certains gestes perçus comme païens, tout en provoquant des négociations locales.

Ce qui se joue alors, oscille entre disparition des rites ancestraux et leur reconfiguration doctrinale et politique. Le statut du corps, les lieux d'inhumation, la temporalité des deuils, les paroles dites ou interdites : autant de dimensions affectées par les prescriptions religieuses. Le christianisme occasionne donc une restructuration de l'économie symbolique, en redéfinissant

les frontières d'acceptabilité, et en recomposant les légitimités rituelles (Sarr, 2010 ; de Witte, 2001).

Ces travaux suggèrent également que les réponses des individus ne se limitent pas à une adhésion ou un rejet. On observe au contraire des stratégies de contournement, de négociation, voire de double inscription rituelle. Le concept de « négociation culturelle » (Noret, 2005) permet de penser ces ajustements non comme des compromis passifs, mais comme des réponses actives à des injonctions multiples. Les individus, souvent pris entre plusieurs autorités (religieuse, lignagère, familiale), composent des solutions situées, parfois dissonantes, mais symboliquement cohérentes pour eux (c'est ce que nous allons montrer).

Dans cette perspective, les funérailles deviennent des lieux privilégiés pour observer l'impact concret de la christianisation, en tant qu'opérateur de transformation rituelle en soi, qui introduit d'autres normes, d'autres priorités, et parfois d'autres acteurs, dans un contexte baoulé, encore peu exploré. C'est à cette grille de lecture que s'arrime la présente recherche, en prenant pour cas d'étude les Baoulé de Côte d'Ivoire, dont les pratiques funéraires – autrefois ancrées dans un système lignager et ancestral – sont aujourd'hui traversées par des logiques chrétiennes qui, comme nous allons le découvrir en modifiant la structure, les temporalités, et les significations. Il ne s'agit pas de postuler une rupture, mais d'examiner, à partir du terrain, comment les prescriptions chrétiennes affectent, déplacent ou reconfigurent les rites funéraires baoulé. C'est à travers ce prisme que cette étude entend contribuer à la compréhension des dynamiques rituelles traditionnelles en contexte religieux.

2. Méthodologie

Cet article s'inscrit dans une démarche qualitative, fondée sur une approche compréhensive des reconfigurations rituelles chez les Baoulé de Côte d'Ivoire. L'objectif principal est d'analyser la manière dont les prescriptions chrétiennes influencent les pratiques funéraires traditionnelles, en mettant au jour les ajustements, les continuités et les recompositions symboliques opérées par les acteurs. Ce positionnement s'appuie sur l'idée que la réalité sociale se construit dans les discours et les interprétations des individus (Denzin & Lincoln, 2011), et que seule une méthode qualitative permet de rendre compte de la complexité des arbitrages entre foi chrétienne et héritage coutumier. L'entretien a été retenu comme outil principal d'enquête, selon l'approche interactionniste développée par Kaufmann (1996), qui conçoit l'entretien comme un lieu de co-construction du sens.

L'étude repose sur six entretiens approfondis réalisés auprès de membres de trois sous-groupes baoulé : les Fâly de Bouaké, les Ahitou de Sakassou et les Ouellé de Ouellé. Pour chaque sous-groupe, une personne a été rencontrée dans son terroir d'origine, et une autre à Abidjan, afin de croiser les expériences rurales et urbaines. L'échantillon a été constitué selon une logique raisonnée (Bertaux, 1997), en ciblant des personnes reconnues pour leur engagement rituel ou religieux. Les entretiens, semi-directifs, ont été menés sur trois ans, en présentiel lorsque possible, et complétés par des échanges à distance. Ce suivi longitudinal a permis de revenir sur certaines zones d'ombre et d'observer l'évolution des représentations à travers le temps.

L'analyse articule deux dimensions : la profondeur narrative, permise par la répétition des échanges, et la variation sociologique, liée à la diversité des trajectoires (urbaines, rurales, charismatiques, catholiques, etc.). En mobilisant les apports de

Blanchet & Gotman (2007) sur les entretiens longitudinaux et de la grounded theory (Glaser & Strauss, 1967), l'étude accorde une attention particulière aux contradictions apparentes, aux ajustements subtils, et aux négociations silencieuses. Ce qui ressort de l'analyse, c'est que les enquêtés, même fortement ancrés dans les pratiques ancestrales, ne perçoivent pas leur foi chrétienne comme une rupture. Ils expriment, au contraire, une fidélité plurielle, où la transmission lignagère et la doctrine ecclésiale ne sont pas vécues comme antagonistes, mais comme deux facettes d'un même parcours de sens.

3. Vers une redéfinition eschatologique : le défunt chrétien face à la tradition baoulé

Les pratiques funéraires baoulé ont longtemps été structurées par un système cosmologique où la qualité de la mort, le statut du défunt et l'accomplissement des rites conditionnaient son accès au monde des ancêtres. Dans cette logique, le traitement du Bo-houliê (le cadavre) n'était pas qu'un acte matériel ; il participait à un processus de réintégration symbolique. Cette structuration s'est toutefois trouvée ébranlée par l'émergence de nouvelles lectures religieuses du salut. Comme le montre M. Diby Jean-Claude, une autre personne ressource de l'enquête de terrain, originaire de Sakassou : « Il est féwa, mais il est chrétien. S'il est catholique, il a droit à sa messe de requiem » (22/11/2024). L'appartenance confessionnelle introduit ici un critère nouveau, désormais suffisant pour légitimer le salut du défunt, quelles que soient les conditions de sa mort. Pour une catégorie de personne devant être inhumée dans les 24 heures, l'appartenance au christianisme impose une pause à l'élan du rite funéraire.

Ce changement ne se limite pas à l'organisation des funérailles ; il touche plus fondamentalement la manière dont les

vivants conçoivent le devenir eschatologique de leurs morts. Le jugement post-mortem, autrefois affaire de la communauté, des ancêtres et des rituels, devient affaire de conscience personnelle. Comme l'explique une des personnes ressources de l'enquête, M. Kra Joseph du sous-groupe baoulé Ouellé : « Après la mort, je vais rejoindre un ou deux de ces environnements : si j'ai beaucoup péché, je vais en enfer. Si j'ai fait du bien, je vais faire le purgatoire avant d'aller au ciel » (07/10/2023). La balance du jugement se déplace ainsi du collectif vers l'individu, du lignage vers la subjectivité spirituelle, bouleversant les cadres d'interprétation du salut.

Ce basculement s'accompagne d'un autre déplacement : celui de la centralité du corps dans le dispositif rituel. Dans la cosmologie baoulé, le cadavre faisait l'objet d'un ensemble de gestes, de paroles, d'offrandes, visant à assurer une bonne transition de l'âme. Mais aujourd'hui, cette dimension semble s'effacer. M. Souanga Mathurin, ayant participé à l'étude, aussi originaire de Ouellé le dit clairement : « Pour un chrétien, la question du corps devient secondaire, car son devenir ne détermine pas celui de l'âme (Wawouê) » (11/06/2022). Le Bohouliê n'est plus le support d'un passage, mais un simple corps à gérer, relégué à une fonction logistique, voire symboliquement neutralisé.

En cohérence avec cette nouvelle perspective, les critères qui définissaient autrefois une « bonne mort » se transforment. Le lieu d'inhumation, par exemple, longtemps considéré comme essentiel — puisqu'être enterré près des siens favorisait l'intégration dans le monde des ancêtres — semble aujourd'hui relativisé. Le discours de M. Kra Joseph le résume : « Celui qui meurt rejoint les ancêtres. Chez le chrétien, celui qui meurt rejoint le Christ » (07/10/2023). Pourtant, cette délocalisation spirituelle ne supprime pas l'attachement au village. Des individus convertis continuent d'exiger l'inhumation sur la terre des

ancêtres, comme en témoigne le cas de M. Souanga Mathurin, fervent catholique, qui avait demandé à être enterré chez lui, ce qui fut fait.

Ce double attachement, à la foi et au lignage, invite à repenser les catégories binaires souvent mobilisées pour lire ces situations. Là où les distinctions traditionnelles établissaient des hiérarchies strictes entre les morts – selon qu’ils soient jeunes, âgés, féconds, mariés ou non – la lecture chrétienne unifie les destins eschatologiques. « On t’enterre comme tu as vécu » (07/10/2023), dit encore M. Kra Joseph. Mais cette phrase, dans la bouche d’un croyant, ne renvoie plus aux normes lignagères, mais à un jugement moral, détaché du statut social.

Cette moralisation du devenir post-mortem s’accompagne d’une relecture du sens même de la mort. Là où la tradition mobilisait les causes magiques ou sociales (sorcellerie, déséquilibre familial), le christianisme propose une explication théologique. M. Souanga Mathurin résume bien cette reconfiguration : « Le développement des religions telles que le christianisme propose une autre explication à la mort, à savoir la volonté de Dieu » (11/06/2022). La mort cesse alors d’être un indice de perturbation cosmique pour devenir un événement sacré, inscrit dans un plan divin.

Cette sacralisation de l’au-delà produit également une transformation des rites. Le christianisme tend à uniformiser les rituels funéraires, notamment à travers la messe de requiem, qui devient une procédure standard pour tous les croyants, quelles que soient leurs conditions de décès. « En principe, le féwa, on ne fait pas de funérailles. On ne pleure pas » (04/02/2025), rappelle M. Kouakou Franck de Sakassou, un autre contributeur à cette étude. Mais dans le christianisme, « tout le monde a droit à son adieu » (04/02/2025), rétorque-t-il implicitement. Le rituel devient un droit, et non plus une reconnaissance méritée.

Pourtant, cette logique d'universalisation n'efface pas totalement les anciens repères spatiaux. Le village conserve son prestige symbolique, et nombreux sont les chrétiens qui choisissent d'y être inhumés. Ce choix ne relève pas seulement de la tradition, mais d'un besoin de continuité identitaire. Le cas de M. Souanga Mathurin, qui avait exprimé ce désir de « retourner auprès des miens » (11/06/2022) après sa mort, en est l'illustration. Le lien à la terre perdure, même dans une eschatologie dés-ancrée.

Dans cette articulation entre deux univers, ce qui frappe n'est pas tant la tension que la fluidité avec laquelle les acteurs baoulé les traversent. « Moi, je donne mon cas. [...] Lorsque je me retrouve face à ma culture, je rejoins les ancêtres qui sont morts là » (07/10/2023), dis M Kra Joseph. Cette déclaration témoigne d'une posture d'intégration, où les appartenances religieuses et culturelles ne s'opposent pas, mais cohabitent dans une continuité vécue comme cohérente et légitime.

Ainsi, les prescriptions chrétiennes ne suppriment pas la logique eschatologique traditionnelle, elles la déplacent, la re-composent, sans nécessairement la nier. Le Bo-houliê n'est plus le centre du dispositif rituel, mais il reste un lieu de mémoire. L'âme, le Wawouê, reste au cœur des préoccupations, mais sa trajectoire est désormais repensée dans le cadre d'une cosmologie chrétienne. Les Baoulé chrétiens ne renient pas leur culture funéraire : ils la vivent autrement, à la croisée des fidélités, dans une dynamique où le salut ne se joue plus seulement dans les gestes, mais dans la foi — et dans la manière de l'articuler à un héritage encore agissant.

4. Des compromis rituels sans rupture : cohabitation ajustée entre Église et tradition dans les funérailles baoulé

L'organisation des funérailles baoulé fait aujourd'hui l'objet de négociations multiples entre logiques chrétiennes et pres-

criptions ancestrales. Ce qui frappe d'abord, c'est que les tensions ne s'expriment pas toujours sous la forme d'une opposition frontale. Elles se matérialisent souvent dans les ajustements concrets que les familles opèrent, notamment autour du statut du corps du défunt, du rôle des sacrifices, ou encore de la structuration des veillées. Comme le résume M. Kouakou Franck de Sakassou : « Ce n'est pas parce que l'Église est venue que c'est pour nous imposer quelque chose. Mais si toi-même tu veux qu'on le fasse, ils vont faire » (04/02/2025). Cette déclaration montre que l'Église ne constitue pas une autorité coercitive absolue, mais un acteur avec lequel il faut composer, selon les contextes et les volontés des individus.

Les veillées funèbres sont probablement l'espace le plus visible de cette cohabitation rituelle. La tradition veut qu'elles soient festives, bruyantes, longues et collectives ; le christianisme les transforme en cérémonies sobres, ponctuées de prières et de cantiques. Cette alternance crée un effet de double temporalité : « Aujourd'hui, les veillées traditionnelles commencent après la veillée chrétienne, aux alentours de minuit ou une heure du matin » (04/02/2025) note M. Kouakou Franck. Les rituels s'enchaînent donc sans s'annuler. L'espace-temps rituel devient compartimenté : l'Église occupe la première partie de la nuit, les ancêtres la seconde.

Ce partage des rôles s'accompagne toutefois d'un déplacement des significations. Là où la veillée traditionnelle était un moment de lien avec l'ancêtre, la veillée chrétienne parle davantage de salut, de jugement, et de foi individuelle. Comme le souligne M. Kra Joseph : « Celui qui meurt rejoint les ancêtres. Chez le chrétien, celui qui meurt rejoint le Christ » (07/10/2023). On assiste ainsi à une superposition de régimes de croyances, dans laquelle la place du défunt bascule d'un référentiel communautaire à une logique ecclésiale. Le mort cesse

d'être un sujet collectif pour devenir un individu en route vers Dieu.

Dès lors, des conflits naissent portant sur les discours et les gestes. Les sacrifices et les offrandes sont parmi les pratiques les plus débattues. Pour beaucoup, il est désormais impensable de faire eux-mêmes les libations. Mais déléguer ces gestes devient un compromis acceptable. M. SOUANGA Mathurin affirme à ce sujet : « Tu es chrétien, si on te dit : donne un cabri. Tu fais et puis on te laisse en paix quoi » (11/06/2022). Le geste est alors privé de son intention rituelle, mais maintenu comme acte de cohésion sociale. La foi chrétienne n'efface pas la coutume ; elle la rend acceptable par délégation.

La durée du veuvage illustre une autre ligne de tension. Si l'Église n'impose pas de règles strictes, la coutume, elle, prescrit des temps de retrait très codifiés selon le sexe, le statut ou l'âge. Chez les Fâly ou les Ouellé, cela peut aller jusqu'à une année entière. Là encore, les arrangements sont fréquents : certains raccourcissent la durée, d'autres maintiennent les formes sans la charge symbolique. On lave toujours le veuf, mais « il y a un traitement religieux très sommaire » (07/10/2023) selon M. Kra Joseph, signe que la norme s'adapte aux convictions du moment.

Une autre tension réside dans la reconnaissance de l'autorité rituelle au moment des funérailles, en particulier en contexte villageois. Contrairement à ce que l'on pourrait croire, l'adoption du christianisme n'efface pas l'influence des autorités lignagères ou traditionnelles telles que le Komian (devin) ou le chef de lignage. Dans les villages, il ne s'opère pas une substitution des registres funéraires, mais une superposition pragmatique : chaque acteur — prêtre, pasteur, chef de lignage, devin — revendique sa légitimité sans exclure la cohabitation des autres. Cette dynamique est clairement formulée par M. N'da Kouakou, une personne ressource de l'étude :

« Ici au village, c'est la tradition d'abord. Tu es chrétien on ne refuse pas. Mais si tu fais façon, les gens ne vont pas s'occuper du corps de ton parent toi-même ça ne va pas te plaire. Donc il faut faire pour toi mais il faut respecter la tradition ». (03/02/2025)

Ce témoignage souligne que, malgré la conversion chrétienne, l'ordre lignager reste premier dans la définition des devoirs funéraires. Toutefois, cette configuration n'est pas universelle : lorsque le défunt est enterré en milieu urbain, l'extraterritorialité de l'inhumation – loin des contrôles lignagers directs – peut favoriser une prise en main totale du rituel par l'Église. Dans ce cas, la gestion chrétienne de la mort s'impose plus aisément, sans la nécessité de négociations coutumières. Ainsi, le fidèle se trouve dans des configurations différenciées selon le contexte géographique, tantôt obligé d'arbitrer entre tradition et religion au village, tantôt plus libre d'aligner la cérémonie funéraire sur les prescriptions chrétiennes en ville.

Cela dit, la pression du groupe joue un rôle majeur dans la mise en œuvre des rites. Même un chrétien fervent ne souhaite pas se couper de sa communauté. La peur du rejet ou du conflit pousse souvent à des concessions. « Même si ton papa t'a dit ça avant de mourir, il faut faire beaucoup de sacrifices avant de l'enterrer avec un cercueil » (04/02/2025), dit M. Kouakou Franck. Ces paroles montrent que les traditions gardent une force contraignante, non par obligation spirituelle, mais par impératif de cohésion. Dans cette logique de négociation, les familles inventent des scénarios hybrides. Une cérémonie chrétienne peut précéder un hommage coutumier ; une messe de requiem être suivie de danses et de libations. M. Kra Joseph, à ce propos, déclare : « Moi, je suis à l'aise. Je suis dans un milieu culturel qui est le mien... Mais si je suis dans un cadre catholique, avec des cérémonies religieuses, je suis aussi à l'aise »

(07/10/2023). Cette capacité à passer d'un registre à l'autre sans dissonance marque un régime d'adaptation souple où la foi ne supprime pas l'appartenance.

La manière dont les décisions sont prises en famille révèle enfin une recomposition des pouvoirs rituels. Les enfants urbains, scolarisés, parfois plus distants de la coutume, négocient avec les aînés ruraux, gardiens des normes ancestrales. Dans ces échanges, chacun cède un peu pour que l'accord tienne. L'autorité rituelle devient partagée, négociée, distribuée selon l'âge, le lieu, la foi.

Enfin, ces compromis révèlent que les tensions ne mènent pas forcément au conflit. Elles deviennent le moteur d'une recomposition constante, dans laquelle les rites ne sont jamais figés. Ils se plient aux circonstances, aux désirs du défunt, aux contraintes du groupe. Le Bo-houliê devient alors plus qu'un cadavre : un lieu de convergence symbolique où s'articulent mémoire, croyance, et stratégie. Que dis-je, la mort devient l'occasion de réinventer l'ordre sociale.

5. Quand le christianisme adopte le regard baoulé sur la mort : entre soupçon sorcellaire et protection rituelle

Dans la tradition baoulé, la mort n'est pas qu'un simple fait biologique. Elle est perçue comme le résultat d'une action intentionnelle, généralement malveillante. Derrière chaque décès se cache un agresseur : un sorcier, un ennemi tapi dans l'ombre des relations sociales. Cette vision profondément ancrée du décès comme acte hostile structure non seulement les rites funéraires mais aussi l'ensemble des représentations collectives. Comme le souligne M N'da Kouakou de Bouaké : « Chez nous, quand quelqu'un meurt, on cherche toujours à savoir qui est derrière, qui a fait ça ? » (03/02/2025). Cette quête d'explication est essentielle car elle permet de restaurer symboliquement l'ordre social menacé par la mort.

Face à cette tradition, l'enseignement chrétien semble proposer un renversement radical : la mort est présentée comme la volonté de Dieu. Elle est perçue non comme une injustice ou une attaque, mais comme un passage voulu ou permis par Dieu. Le prêtre et le pasteur insistent sur l'idée que la vie appartient à Dieu et que la mort doit être acceptée dans l'espérance du salut. Cependant, sur le terrain, cette perspective théologique reste largement théorique. Dans les faits, les discours chrétiens sur la mort en milieu baoulé sont marqués par une ambivalence persistante. « On dit que c'est Dieu qui a donné et qui a repris, mais derrière, on consulte pour connaître le ou la responsable. Pendant mon enfance à Ouellé, ce sont des choses que j'ai vu plusieurs fois » (22/11/2024), confie M Diby Jean Claude.

Cette double lecture produit une forme de duplicité discursive : en public, notamment dans les messes de funérailles, le discours dominant est celui de l'acceptation de la volonté divine. Mais dans les échanges privés, en famille ou entre proches, la question du responsable, du sorcier potentiel, refait surface. Cette coexistence de deux grilles d'interprétation est particulièrement marquée lors des moments de deuil intense, où les affects ravivent les réflexes d'accusation. M Souanga Mathurin précise ainsi : « À l'église, on pleure, on prie pour son âme, mais après, le devin peut demander, si la famille le veut, il peut demander au défunt de révéler l'identité du coupable » (11/06/2022). La tension entre résignation chrétienne et soupçon coutumier ne se résout pas : elle se gère, au quotidien, dans un compromis tacite.

Par ailleurs, le rôle des prophètes charismatiques est déterminant dans cette dynamique d'hybridation. Ces figures, très présentes dans les Églises évangéliques et charismatiques, n'hésitent pas à utiliser le langage de la sorcellerie pour ré-

pondre aux attentes populaires. Ils organisent des prières d'« anéantissement des œuvres du diable », dénoncent publiquement des « esprits de mort », et parfois même désignent des « sorciers tueurs » au sein de l'assemblée. Loin de purger les imaginaires baoulé, ils les réactivent en leur donnant une coloration chrétienne. « Il y a des pasteurs ici qui peuvent te dire : ta tante est sorcière, c'est elle qui a tué ton fils » (22/11/2024), rapporte M Diby Jean-Claude. Ce phénomène montre que le christianisme local ne se contente pas d'une cohabitation avec la tradition : il l'épouse parfois jusqu'à en reproduire les mécanismes accusatoires.

Dans ce contexte, la protection contre la mort n'est plus exclusivement assurée par les sacrifices traditionnels ou les prescriptions rituelles lignagères ; elle passe aussi par des pratiques aujourd'hui considérées comme chrétiennes. Des séances de délivrance, des veillées de prière, l'usage d'eau bénite ou encore d'objets symboliquement investis (croix, huiles consacrées) sont mobilisés pour conjurer le mal, repousser les esprits ou « briser les chaînes de la sorcellerie ». Comme le résume M N'da Kouakou : « Maintenant, on ne fait plus des sacrifices, mais on prie beaucoup et on utilise l'eau bénite » (03/02/2025). Ce qui apparaît, à l'échelle du discours, comme une rupture avec les pratiques ancestrales, se révèle dans les faits comme un simple déplacement du registre symbolique. Ce sont moins les gestes qui changent que leur habillage doctrinal. Mais ce déplacement n'est que rarement perçu par les acteurs eux-mêmes : chaque fois que cette continuité rituelle implicite a été suggérée à des enquêtés, leurs premières réactions ont été la surprise ou la dénégation, avant qu'ils n'en reconnaissent la logique. Ainsi, sans toujours en avoir conscience, ils substituent un système de médiation à un autre — changeant de langage et de divinité, mais conservant la structure de l'action rituelle.

Cette transformation dans l'économie de la protection n'efface donc ni les affects, ni les inquiétudes qui entourent la mort. Le soupçon reste actif, et l'hostilité sociale continue d'être perçue comme un facteur déterminant du décès. Il n'est pas rare que certaines cérémonies chrétiennes soient motivées, voire structurées, par une angoisse persistante : peur de la sorcellerie, peur d'un retour du défunt non apaisé, peur d'une « contamination spirituelle ». Certains fidèles, malgré leur adhésion aux Églises, ne se défont pas totalement de leurs objets de protection issus des pratiques ancestrales. M N'da Kouakou observe ainsi que « même à l'église, les gens viennent avec des protections cachées, ou bien ils ont ça dans leurs maisons. Quand on parle entre nous, on sait ce qu'on se dit » (03/02/2025). Cette attitude traduit une forme de cumul des assurances spirituelles : pour faire face à la peur de la mort, on préfère souvent ajouter une croyance à une autre plutôt que de choisir. Ce syncrétisme pragmatique révèle moins un affaiblissement de la foi chrétienne qu'une stratégie d'accumulation symbolique, dans laquelle les logiques de l'efficacité rituelle l'emportent sur les exigences doctrinales de cohérence.

Les funérailles offrent donc un observatoire privilégié pour saisir cette porosité entre deux systèmes d'interprétation. Lors des veillées, les prières pour l'âme du défunt côtoient les soupçons murmurés sur les circonstances du décès. L'acte rituel chrétien n'efface pas la question de la causalité occulte ; il lui offre un nouveau cadre d'expression. Ainsi, l'Église devient moins un espace de refondation qu'un lieu d'ajustement des inquiétudes anciennes. Comme l'exprime M Kouakou Franck : « Aujourd'hui, il y a des gens, des pasteurs ou prophètes, quand tu vas les voir, ils peuvent te dire clairement qui a tuer ton parent... oui un peu comme le Komian (devin) » (04/02/2025).

Cette dynamique produit une inversion partielle des rôles : là où autrefois le devin-guérisseur (Komian) était consulté après les funérailles pour identifier les sorciers, c'est désormais parfois dans l'Église même que l'on cherche la révélation. Cette substitution institutionnelle montre que la pénétration du christianisme dans la société baoulé ne s'est pas faite contre la culture locale, mais à travers elle. L'Église ne combat pas toujours la sorcellerie comme croyance : elle en propose une traduction doctrinale compatible avec ses dogmes sur le mal, Satan et la lutte spirituelle.

Finalement, l'analyse montre que l'imaginaire sorcellaire baoulé a résisté à l'évangélisation, non en s'opposant frontalement au christianisme, mais en l'infléchissant de l'intérieur. Les catégories de la tradition – sorcier, mal mort, protection rituelle – continuent d'irriguer la vie spirituelle des Baoulé chrétiens. Cette influence inversée rappelle que l'Église, n'impose pas un modèle étranger, en revanche, elle se laisse modeler par les univers de sens locaux. Ainsi, dans la gestion sociale et rituelle de la mort, c'est la tradition baoulé qui, silencieusement mais efficacement, façonne les adaptations chrétiennes.

6. La foi sans rupture dans les rites funéraires baoulé

Le cas baoulé présenté ici s'inscrit dans une dynamique largement documentée dans les travaux consacrés aux transformations religieuses en Afrique. Des auteurs comme Dozon (1995), Thomas (1982), de Witte (2001) ou plus récemment Norret (2014, 2017) ont montré comment les rituels funéraires, autrefois ordonnés par des cosmologies lignagères, se reconfigurent à mesure que les Églises chrétiennes investissent la scène rituelle. Les messes de requiem, l'effacement progressif de certaines distinctions entre morts « achevés » et « inachevés », ou encore le recentrage du rituel autour du salut individuel, marquent les traits d'un mouvement régional où la tradition

s'adapte, se dédouble, ou parfois s'efface. Le cas baoulé confirme ces analyses tout en les situant dans une configuration ivoirienne spécifique, où les appartenances confessionnelles s'articulent étroitement aux appartenances lignagères. Comme l'observe Dakouri Gadou (2017), le christianisme n'efface pas la tradition, il l'oblige à se repositionner dans un environnement rituel plus concurrentiel, marqué par la circulation des doctrines, mais aussi des émotions.

Cela étant, cette recherche ne se contente pas de reconduire ces acquis. Elle introduit une inflexion analytique importante en insistant sur la manière dont les acteurs vivent ces recompositions rituelles. Car si les Églises et les systèmes symboliques peuvent paraître doctrinalement incompatibles, cette disjonction ne produit pas, pour autant, de contradiction ressentie par les fidèles eux-mêmes. Les Baoulé chrétiens ne vivent pas nécessairement leur foi comme une alternative à la tradition, mais bien comme une modalité renouvelée d'habiter leur appartenance ancestrale. Ce que cette étude met au jour, c'est cette solution de continuité opérée par les individus, souvent sans la verbaliser, mais dont les pratiques témoignent avec éloquence. Là où la littérature évoque des formes de bricolage rituel ou d'hybridation pragmatique (Comaroff & Comaroff, 2009), cette enquête fait un pas de plus en révélant que l'unité du système ne passe pas par la cohérence des prescriptions, mais par la subjectivité de celui qui les agence.

Autrement dit, la tension entre ancestralité et christianisme est moins portée par les institutions qu'incorporée par les individus. C'est dans leur manière d'habiter simultanément plusieurs univers de sens, de faire tenir ensemble des logiques apparemment dissonantes, que s'opère la recomposition. Ce déplacement du regard – des structures aux subjectivités – permet de revisiter le débat sur la conflictualité rituelle. Il ne s'agit plus

seulement de constater une superposition des formes, mais de comprendre comment cette superposition est rendue intelligible par ceux qui la pratiquent. Noret (2017) l'avait déjà suggéré dans ses travaux sur le Bénin, sans toutefois mettre l'accent sur le rôle de l'acteur comme point de jonction vivant entre les normes coutumières et les références chrétiennes. C'est à ce niveau que le cas baoulé enrichit la littérature : il donne à voir une subjectivation du religieux, dans laquelle la foi n'abolit pas l'héritage, mais le réinterprète dans les termes de la croyance vécue.

Cette continuité vécue se double, dans certains contextes, d'un phénomène inverse : une traditionnalisation du christianisme lui-même. En captant l'imaginaire de la sorcellerie, en intégrant le soupçon comme mode d'interprétation de la mort, en réinvestissant des dispositifs de protection familiaux – objets bénis, prières d'onction, séances de délivrance – les Églises, notamment pentecôtistes et charismatiques, traduisent leur message dans le langage symbolique local (Meyer, 2019 ; Engelke, 2007). On assiste alors à une dynamique que l'on pourrait qualifier de réversibilité rituelle : si les chrétiens baoulé adaptent les rites aux exigences de leur foi, ils modèlent aussi leur foi sur les attendus du monde coutumier. L'horizon chrétien devient alors un répertoire parmi d'autres, mobilisé pour garantir la paix du défunt, mais aussi pour se prémunir contre les puissances invisibles. Gadou Dakouri (2004), dans ses travaux sur les prophétismes en pays Dida, note déjà cette appropriation stratégique du langage traditionnel par les acteurs religieux eux-mêmes, soucieux de répondre à la demande locale de protection.

Ce glissement sémantique ouvre une piste originale : celle de la patrimonialisation des croyances chrétiennes. Non pas leur muséification, mais leur inscription dans des chaînes de légitimation qui les rendent compatibles avec l'univers de sens an-

cestral. Ce phénomène, encore peu étudié, mérite d'être exploré, car il suggère que les identités religieuses ne se construisent pas uniquement par rupture ou conversion, mais aussi par enchevêtrement. Il serait réducteur de penser que les Églises captent les Baoulé à travers une substitution doctrinale ; elles les captent en épousant leurs manières de croire, en naturalisant les références chrétiennes au point de les rendre parfois indiscernables des croyances ancestrales. Il ne s'agit pas là d'une simple stratégie missionnaire, mais d'un processus d'intériorisation croisée où l'Évangile devient un opérateur culturel autant qu'un message spirituel. C'est à ce croisement que s'ancre la contribution originale de cette recherche.

En définitive, cette étude suggère que ce ne sont pas les logiques chrétiennes ou traditionnelles qui s'ajustent l'une à l'autre de manière structurelle, mais les sujets eux-mêmes qui produisent la continuité entre elles. Le dépassement des contradictions doctrinales ne passe pas par une réforme des Églises ni par un effacement des rites ancestraux, mais par une plasticité croyante, incarnée dans les gestes, les choix, les récits. Le christianisme, dans ce contexte, ne domine pas la tradition ; il s'y fonde par endroits, s'en distingue à d'autres, et surtout se transforme à son contact. Ce sont là des lignes de fuite que la littérature actuelle ne cesse d'ouvrir, mais qu'il reste à suivre dans leur complexité concrète. À ce titre, le terrain baoulé n'est pas une exception : il est une scène exemplaire où se donne à voir la fabrique ordinaire de la coexistence rituelle.

Conclusion

Ce que révèle cette étude sur les rites funéraires baoulé, ce n'est pas tant une opposition entre tradition et christianisme

qu'un ajustement silencieux, négocié, souvent imperceptible, mais profondément structurant. Là où les lectures classiques identifient des ruptures – entre ancestralité et salut, entre hiérarchie rituelle et égalitarisme religieux –, les acteurs rencontrés, eux, fabriquent des continuités. Ces continuités ne sont ni systématisées ni revendiquées comme telles : elles se donnent à voir dans les gestes, dans les arbitrages, dans la manière de faire tenir ensemble l'eau bénite et le sacrifice, la prière au Christ et le respect des ancêtres. La cohérence ne vient pas des doctrines, mais des personnes elles-mêmes, qui, à l'intérieur de leur subjectivité, opèrent une jonction entre des univers de sens que tout semble séparer.

Ces constats confirment certains acquis de la littérature. Des auteurs comme de Witte (2001), Noret (2014, 2017) ou encore Gadou Dakouri (2005) ont bien montré comment les Églises participent à la transformation des rites funéraires africains, en imposant de nouveaux formats symboliques et une logique du salut individuel. Mais cette enquête invite à déplacer le regard. Il ne s'agit plus seulement de dire que les traditions s'adaptent, ni que les Églises captent des éléments culturels locaux. Il s'agit de montrer que ce sont les individus – en l'occurrence, les Baoulé – qui fabriquent du lien entre des régimes symboliques a priori incompatibles. En cela, l'acteur baoulé chrétien ne subit pas la recomposition rituelle : il en est l'artisan discret.

Ce déplacement n'est pas anodin. Il ouvre une perspective originale sur ce que l'on pourrait appeler une patrimonialisation interne du religieux chrétien, dans laquelle la foi, n'efface pas l'héritage coutumier, mais en devient un des langages possibles. Il arrive même que le christianisme soit mobilisé pour légitimer les croyances ancestrales – comme si l'Église, après avoir été un marqueur de rupture, devenait à son tour une ressource symbolique inscrite dans le patrimoine rituel. Cette évolution, observable surtout dans les courants charismatiques,

suggère une reconfiguration locale de la doctrine, non pas imposée par les Églises, mais négociée par les fidèles eux-mêmes, au nom d'une exigence de continuité symbolique.

C'est dans cette perspective que les funérailles apparaissent comme des lieux particulièrement révélateurs. Loin d'être des scènes d'affrontement entre passé et présent, elles deviennent des théâtres d'invention, où les contradictions sont dépassées non par consensus théologique, mais par des pratiques concrètes. Le défunt, les messes de requiem, les veillées partagées entre chants liturgiques et libations, les paroles de prophètes et les silences des aînés : tout cela compose un univers ritualisé où ce qui importe, finalement, ce n'est pas la conformité doctrinale, mais l'efficacité symbolique perçue par ceux qui croient.

En analysant ces arrangements, cette recherche propose un éclairage renouvelé sur la plasticité des systèmes rituels africains. Elle montre que l'unité du rite ne repose pas sur l'homogénéité de ses références, mais sur la capacité des individus à produire du sens dans des contextes traversés par la pluralité. C'est à cette condition que les funérailles baoulé conservent leur vitalité : non comme reproduction figée d'un ordre ancien, mais comme mise en forme dynamique d'identités en mouvement. Elles ne marquent pas la fin d'un monde, mais deviennent l'espace même où se redessinent les lignes d'appartenance et les contours du croire.

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Social Interaction in a Child with Down Syndrome

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Abstract:

The present study aimed to determine the level of social interaction in a child with Down syndrome, as well as to identify differences in the level of social interaction according to the variables of age, gender, and degree of disability. The descriptive method was used with the Social Interaction Scale prepared by Nebras Mohammed Al-Murad (2004) to achieve this objective. The study sample consisted of 30 children with Down syndrome attending the Pedagogical Psychological Centre for Mentally Disabled Children – Esto–Oran. The study yielded the following results: there is a high level of social interaction in children with Down syndrome; statistically significant differences exist in the level of social interaction according to the age variable; no statistically significant differences were found according to the gender variable; and statistically significant differences were found according to the degree of disability.

Keywords: Down syndrome, child with Down syndrome, social interaction

Interaction sociale chez un enfant atteint du syndrome de Down

Résumé :

La présente étude visait à déterminer le niveau d'interaction sociale chez un enfant atteint du syndrome de Down, ainsi qu'à identifier les différences dans le niveau d'interaction sociale en fonction des variables de l'âge, du sexe et du degré de handicap. La méthode descriptive a été utilisée avec l'échelle d'interaction sociale préparée par Nebras Mohammed Al-Murad (2004) pour atteindre cet objectif. L'échantillon de l'étude était composé de 30 enfants atteints du syndrome de Down et fréquentant le Centre psychopédagogique pour enfants handicapés mentaux d'Esto-Oran. L'étude a donné les résultats suivants : il existe un niveau élevé d'interaction sociale chez les enfants atteints du syndrome de Down ; des différences statistiquement significatives existent dans le niveau d'interaction sociale en fonction de la variable de l'âge ; aucune différence statistiquement significative n'a été trouvée en fonction de la variable du genre ; et des différences statistiquement significatives ont été trouvées en fonction du degré d'invalidité.

Mots-clés : Syndrome de Down, enfant atteint du syndrome de Down, interaction sociale

Introduction

Problem Statement

Childhood is a fundamental stage in forming an individual's personality, during which the child acquires language, self-care skills, and social behaviours. Therefore, researchers and specialists in psychological and social sciences pay great attention to this stage, seeking a more profound understanding and solutions to its most important problems. They aim to extract appropriate educational and psychological methods to assist parents at home and specialists in special education centres in providing the highest upbringing models to raise a well-adjusted, socially integrated generation. Down syndrome is considered a neurodevelopmental disorder that causes families of affected children to face numerous problems encompassing all aspects of life. Children with Down syndrome suffer from multiple developmental impairments that prevent them from being fully independent and from learning typically like their peers, which negatively affects their social interaction both within the family and in social environments. Psychological studies addressing social interaction in children with Down syndrome have demonstrated an apparent deficit in communication skills compared to their peers. This was highlighted by the study of Dickens and Hudacek (1994), which examined the development of social adaptation behaviours in children with Down syndrome by measuring social adaptation according to the age variable. The researchers applied a social adaptation scale to 80 children between 10 and 11.5 years old. The results revealed weaknesses in communication skills and indicated that the strengths and weaknesses of adaptive behaviour in children with Down syndrome are subject to change and decline with age and developmental progression.

The study conducted by Leveland and Kelley (1991) aimed to measure social skills in two groups of children: children with Down syndrome and children diagnosed with autism. The study yielded the following results: children with Down syndrome demonstrated better ability to acquire social skills than children with autism; however, the researchers found no differences between the two groups in communication ability. Children with Down syndrome showed better adaptation than children with autism in behaviours such as sitting, toileting, social conduct, and walking. Furthermore, children with Down syndrome exhibited more significant progress in social skills and daily living skills compared to children with autism.

Meanwhile, Dykens, Hodapp, and Evans (1994) investigated the strengths and weaknesses in adaptive behaviour among children with Down syndrome, revealing deficits in communication specifically related to social skills in these children.

The study by Sami Al-Azzawi (2012) aimed to determine the level of social interaction among a sample of Riyadh children born to working and non-working mothers. The results indicated no statistically significant differences related to the gender variable (male-female). The researcher recommended fostering a spirit of friendship among children, as it enhances their social interaction.

Based on the foregoing, the present study was designed to investigate social interaction among children with Down syndrome within a local environment, aiming to assess the level of social interaction under a set of demographic variables. Accordingly, the research problem was formulated through the following questions:

- What is the level of social interaction in a child with Down syndrome?

- Are there statistically significant differences in the level of social interaction in a child with Down syndrome according to the age variable?
- Are there statistically significant differences in the level of social interaction in a child with Down syndrome according to the gender variable?
- Are there statistically significant differences in the level of social interaction in a child with Down syndrome according to the degree of disability variable?

Study Hypotheses:

- There is a moderate level of social interaction in children with Down syndrome.
- There are statistically significant differences in the level of social interaction in children with Down syndrome according to the age variable.
- There are statistically significant differences in the level of social interaction in children with Down syndrome according to the gender variable.
- There are statistically significant differences in the level of social interaction in children with Down syndrome according to the degree of disability variable.

Study Objectives:

Based on the proposed hypotheses, the objectives of the study are as follows:

- To determine the level of social interaction in children with Down syndrome.
- To identify differences in the level of social interaction in children with Down syndrome according to the age variable.

- To identify differences in the level of social interaction in children with Down syndrome according to the gender variable.
- To identify differences in the level of social interaction in children with Down syndrome according to the degree of disability variable.

Significance of the Study:

The present study's importance lies in its focus on a specific group of children with unique characteristics within society, namely children with Down syndrome. This is achieved by gaining closer insight into them, understanding their developmental characteristics and needs, and identifying their problems, with particular emphasis on their level of social interaction under a set of variables: age, gender, and degree of disability.

1. Theoretical Framework of the Study:

1.1 Down Syndrome:

1.1.1 Definition of Down Syndrome:

Down syndrome is one of the most prevalent syndromes. It was named after the English physician John Langdon Down in 1866, who was the first to identify its physical characteristics. The syndrome results from a chromosomal abnormality in chromosome 21, where the total number of chromosomes becomes 47 instead of the usual 46, a discovery made in 1959 (Ubaidi, 2021, p. 52).

A child with Down syndrome is defined as any child whose cells contain 47 chromosomes instead of the usual 46, precisely due to an extra copy of chromosome 21, and who displays distinctive congenital traits compared to typical peers (Al-Areed, p. 263).

In this study, a child with Down syndrome is operationally defined as any child with Down syndrome aged between 6 and 12 years, enrolled at the Pedagogical Psychological Centre for Mentally Disabled Children – Esto – Oran.

1.1.2 Types of Down Syndrome:

- a. **Trisomy:** Each cell contains an additional chromosome in this type, resulting in 47 chromosomes instead of the usual 46. This extra chromosome is located on chromosome 21. This type is the most common, representing approximately 94% of Down syndrome cases.
- b. **Translocation** occurs when a portion of chromosome 21 attaches to chromosome 14 in most cases. The prevalence of this type accounts for about 4% of all Down syndrome cases.
- c. **Mosaicism:** This is the least common type among the three, accounting for approximately 2% of children with Down syndrome. In this case, chromosomal abnormalities occur in some cells while others remain normal. Some body cells have an extra chromosome 21, while others do not. This condition is the closest to the typical genetic structure (Mu'in, p. 34).

1.1.3 Characteristics of Down Syndrome:

Children with Down syndrome are distinguished by a set of characteristics summarised in the following domains:

- a. **Physical Characteristics:** These include:
 - The face is round, flat, and broad; the head is small; the hair is fine and thin. The nose is small, flat, and broad with upward-facing nostrils. The ears are small and square-shaped.

- The mouth is small and often open due to an enlarged tongue that protrudes outward and contains fissures. The eruption of deciduous and permanent teeth, often weak, is delayed.
- The hands are small with short fingers; a single prominent crease appears in the palm. Finger use is weak, and fingerprint patterns are predominantly in the shape of the letter L.
- The skin surface is thick and dry, with folded layers covering the edges of the eyes. The eyes are slanted upwards at the sides, giving an atypical appearance. The iris contains white spots, and overall muscle tone is reduced.
- The neck is short and broad, with loose skin on the sides. The shoulders are broad and thick, the chin is small, and the trunk is long with abdominal protrusion. The arms and legs appear small relative to the trunk, giving an impression of dwarfism.
- The feet are flat with weak toes, and a gap exists between the big and other toes.
- The pelvis is small, and there are congenital malformations in internal organs, significantly affecting the respiratory system and the heart. The brain is smaller than average.
- They exhibit abnormal alignment of facial bones and the risk of developing osteoporosis increases with age.
- There is a delay in the emergence of secondary sexual characteristics, accompanied by underdeveloped genitalia.
- Speech defects and hoarseness of voice are present from childhood.
- There is impaired motor development and poor coordination between body parts (Ibrahim, 2022, p. 158).

b. Intellectual Characteristics: These include:

- The intellectual ability of children with Down syndrome ranges from moderate to mild impairment, with an intelligence quotient (IQ) between 50 and 70.
- There are individual differences in demonstrating cognitive abilities and skills.
- Females with Down syndrome tend to have higher intellectual abilities compared to males, especially during puberty.
- They experience deficits in perception and abstract thinking, manifesting difficulties with discrimination and recognition and noticeably affecting sensory processing.
- Cognitive development is delayed due to memory deficits, evident in difficulty retaining and recalling words during speech and attentional deficits (Al-Adl, 2013, p. 145).

c. Social Characteristics:

Some children with Down syndrome are characterised by affection and warmth towards others, while others display negative behaviours such as excessive stubbornness and aggression. They are outgoing, greeting and shaking hands with everyone they meet. They seek to approach those older than themselves, whether at home or in the centre. They tend to imitate and mimic others and exhibit a love for music. They are also inclined towards playfulness, cheerfulness, and enjoyment of activities. Their social development tends to progress more rapidly than their intellectual development (Al-Shammari, 2001, p. 24).

1.2 Social Interaction:

1.2.1 Definition of Social Interaction:

Social interaction is a reciprocal influence process between the individual and the group through which integration into social life occurs. It relies on studying and analysing the behaviour produced by an individual in social situations as a response to a stimulus originating from another person. In turn, this response acts as a stimulus for a subsequent reaction from the first person. This alternation of reactions constitutes social interaction, which forms the basis of relationships between individuals and groups (Bakoush & Ahmed, 2021, p. 309).

In the present study, social interaction is operationally defined by the score obtained by a child with Down syndrome on the Social Interaction Scale developed by Nebras Mohammed Al-Murad (2004) through its four dimensions: communication, expectation, role perception, and meaningful symbols.

1.2.2 Modes of Social Interaction:

Social interaction is based on four modes:

- a. **Communication:** This refers to the transmission of a specific idea or meaning from the mind of one individual to another individual or a group through communication, which is fundamental for social interaction.
- b. **Expectation:** This involves a mental orientation and readiness for anticipated responses such as acceptance or rejection. A person's behaviour is shaped according to the expected reaction of others, and they adjust their behaviour based on these expectations.
- c. **Role Perception and Performance:** Interaction among individuals relies on their awareness of their role in society, which provides a practical explanation of human behaviour through the performance of different roles during in-

teractions with others. This is based on the experience gained from social relationships.

- d. **Meaningful Symbols:** Meaningful symbols include language, facial expressions, and hand gestures recognised by society that convey specific meanings, facilitating accurate communication, expectation, and role perception (Hilal, 2010, p. 41).

1.3. Objectives of Social Interaction:

These are summarised as follows:

- To achieve common goals and thereby satisfy shared needs.
- To enable individuals and groups to acquire various behavioural patterns and learn attitudes that regulate relationships among them within the framework of prevailing societal values and traditions.
- To help individuals avoid isolation and achieve self-realisation through positive interaction with the group.
- Social interaction prepares individuals for good social upbringing by instilling shared characteristics among family members.
- It assists in continuous self-evaluation and evaluation of others (Al-Azzawi & Qais Kareem, 2012, p. 54).

1.4. Social Interaction in a Child with Down Syndrome:

Social interaction in a child with Down syndrome is manifested through their daily life behaviours and relationships with others. It encompasses any skill the child demonstrates in expressing themselves to others, their willingness to approach and communicate with others, participation in various daily social activities, forming new friendships, using different social signals to communicate, and adhering to social etiquette in interactions. Children with Down syndrome acquire social be-

haviours from their environment indirectly and unintentionally, which may be either positive or negative (Al-Azzawi & Qais Kareem, 2012, p. 57).

Numerous studies have shown that children with Down syndrome possess many skills that are capable of development, such as social communication and social interaction skills. These skills enable them to engage with their environment, feel a sense of importance and belonging, and support the development of other aspects of their lives, including cognitive, sensory, motor, and language skills. They also enhance their capacity for learning and interacting with others.

2. Methodological Framework of the Study:

2.1 Research Method:

The descriptive method was used since the study aims to determine the level of social interaction in children with Down syndrome under a set of variables. This method involves describing the phenomenon under study and collecting accurate quantitative and qualitative information about it. The Social Interaction Scale developed by Nebras Mohammed Al-Murad (2004) was employed to achieve the study's objective. The scale consists of 54 items divided into four dimensions:

- a. **Communication Dimension:** This dimension demonstrates cohesion by uplifting others, providing help and assistance, showing comfort and signs of tension relief, and expressing satisfaction, agreement, acceptance, understanding, and obedience. It includes the following items: 1, 2, 11, 12, 16, 19, 25, 30, 31, 39, 40, 49, 50, 51, 52, 54.
- b. **Expectation Dimension:** This involves decision-making, self-reliance, influencing others, expressing opinions, articulating feelings and desires, controlling expected behaviour, and anticipating actions. It includes items 3, 9, 10, 13, 20, 27, 32, 35, 36.

- c. **Role Perception and Performance Dimension:** This includes awareness and affirmation of duties, participation in activities, the ability to represent others' roles, feeling a sense of importance, and knowing one's capabilities. Items included are: 4, 7, 8, 14, 17, 22, 24, 26, 33, 37, 41, 42, 45, 46.
- d. **Meaningful Symbols Dimension:** This covers language, facial expressions, hand use, unity of thought, goals and thinking, ideas, feelings, and execution. Items included are: 5, 6, 15, 21, 23, 28, 29, 34, 38, 43, 44, 47, 48, 53.

Responses to the scale items are measured on a three-point Likert scale: Never (0), Sometimes (1), Always (2), considering the direction of each item, whether positive or negative. The levels of social interaction are estimated according to the key presented in the following table:

Table 1
Scoring Key for the Social Interaction Scale

Level of Social Interaction	Score Range
Low	0 – 27
Moderate	28 – 55
High	56 – 83

To assess the psychometric properties of the scale, results obtained from the study by researcher Maryam Bouziani Bettoul (2013) in Ghazlan on social interaction among children with intellectual disabilities were used. The scale's validity was verified through content validity (expert validity) by presenting it to 10 specialised clinical psychology professors affiliated with the University of Oran 2, Ghazlan University, and Chlef University. They confirmed that the scale items were clear and suitable for the study objectives, with a validity percentage ex-

ceeding 50%. Reliability was verified by applying the scale to a sample of 80 intellectually disabled children attending the Medical Pedagogical Centre for the Mentally Disabled in Oued Jemaa-Ghazlan. Using Cronbach's alpha and split-half methods, correlation coefficients were high, ranging between 0.71 and 0.72, indicating that the scale possesses psychometric properties suitable for application in the present study.

2.2 Study Sample and Characteristics:

The study sample consisted of 30 children with Down syndrome attending the Medical Pedagogical Centre - Esto-Oran. They were selected randomly and exhibited the following characteristics:

Table 2
Characteristics of the Study Sample

Variable	Category	Frequency	Percentage (%)
Gender	Male	16	53.33
	Female	14	46.66
Age	7 to 12 years	8	26.66
	13 to 18 years	22	73.33
Degree of Disability	Moderate	23	76.66
	Mild	7	23.33
Total		30	100

Based on Table 2, which presents the characteristics of the study sample according to the gender variable, it is observed that the number of males exceeds that of females, with males representing 53.33% and females 46.66%. Regarding the age distribution, the majority of the sample is between 13 and 18 years, accounting for 73.33%, whereas children aged between 7

and 12 years represent 26.66%. In terms of degree of disability, children with Down syndrome classified as having a moderate level of disability constitute 76.66%, a high percentage compared to those with mild disability, who represent 23.33%.

3. Presentation and Discussion of Results:

3.1 Presentation and Discussion of the First Hypothesis Results:

The first hypothesis states that "there is a moderate level of social interaction in children with Down syndrome." To test this hypothesis, frequencies and percentages were used, yielding the following results:

Table 3

Level of Social Interaction in Children with Down Syndrome

Percentage (%)	Frequency	Level of Social Interaction
33.3	10	Moderate
66.7	20	High
100	30	Total

Based on Table 3, which presents the level of social interaction among children with Down syndrome, it is observed that the majority of the sample (66.7%) exhibit a high level of social interaction. In comparison, the remaining 33.3% demonstrate moderate social interaction.

This result aligns with the study conducted by Leveland and Kelley (1991), which measured social skills in two groups of children: children with Down syndrome and children diagnosed with autism. Their findings indicated that children with Down syndrome had a better ability to acquire social skills compared to children with autism. Furthermore, children with Down syndrome showed superior adaptation in behaviours such as sitting, toileting, social conduct, and walking, as well as

more significant advancement in social skills and daily living skills relative to children with autism.

Dykens, Hodapp, and Evans (1994) examined the strengths and weaknesses in adaptive behaviour among children with Down syndrome. Their findings did not align with those of the present study. Their findings indicated a deficit in communication-related to social skills in children with Down syndrome.

3.2. Presentation and Discussion of the Second Hypothesis Results:

The second hypothesis states that "there are statistically significant differences in the level of social interaction in children with Down syndrome according to the age variable." To test this hypothesis, an independent samples t-test was used, yielding the following results:

Table 4
Differences in the Level of Social Interaction According to the Age Variable (Significance Level at 0.05)

Statistical Method		N = 30				
Dimensions		Mean (M)	Standard Deviation (SD)	t-value (t)	Degrees of Freedom (df)	Significance (p-value)
Communication	7 to 12	23.3750	2.19984	2.542	28	0.001 Significant
	13 to 18	18.6364	5.05725			
Expectation	7 to 12	11.5000	2.44949	1.225	28	0.258 Not Significant
	13 to 18	10.3182	2.29671			

Role Perception and Performance	7 to 12	20.6250	2.77242	4.166	28	0.000 Significant
	13 to 18	14.8182	3.55416			
Meaningful Symbols	7 to 12	20.3750	1.76777	2.274	28	0.002 Significant
	13 to 18	16.3636	4.82598			
Total Scale Score	7 to 12	75.8750	6.97828	2.973	28	0.000 Significant
	13 to 18	60.1364	14.24712			

Based on Table 4, which presents the t-values and their statistical significance for differences in social interaction levels according to the age variable (significance level at 0.05), it is evident that there are differences between the two age groups (7 to 12 years and 13 to 18 years) in the level of social interaction. This is reflected in the differing mean scores across the dimensions: communication, role perception and performance, meaningful symbols, and the overall scale. This is further supported by the t-values for all scale dimensions except for role perception and performance.

Therefore, we can conclude that the hypothesis stating, "There are statistically significant differences in the level of social interaction in children with Down syndrome according to the age variable," favouring the older age group (13–18 years), has been confirmed. This result aligns with the study by Dykens and Hodapp, which found that adaptive behaviour in children with Down syndrome improves with age.

3.3 Presentation and Discussion of the Third Hypothesis Results:

The third hypothesis states that "there are statistically significant differences in the level of social interaction in children with Down syndrome according to the gender variable." An independent samples t-test was used to test this hypothesis. The results are presented as follows:

Table 5
Differences in the Level of Social Interaction According to the Gender Variable

Statistical Method		N = 30				
Dimensions		Mean (M)	Standard Deviation (SD)	t-value (t)	Degrees of Freedom (df)	Significance (p-value)
Communication	Male	20.6250	4.68864	0.858	28	0.402 Not Significant
	female	19.0714	5.22515			
Expectation	Male	11.3125	2.38659	1.747	28	0.089 Significant
	Female	9.8571	2.14322			
Role Perception and Performance	Male	17.0000	4.42719	0.875	28	0.386 Not Significant
	Female	15.6429	4.01166			
Meaningful Symbols	Male	18.0625	4.53826	0.801	28	0.341 Not Significant
	Female	16.7143	2.66457			
Total Scale	Male	67.0000	14.31084	1.084	28	0.288 Not Significant
	Female	61.2857	14.52016			

Based on Table 5, which presents the differences in the level of social interaction according to the gender variable, it is observed that there are no significant differences between males and females in the level of social interaction. This is evident from the close means for the overall scale and the dimensions (communication, role perception and performance, meaningful symbols). However, a slight difference was observed in the means, which was statistically significant at the 0.05 significance level in the expectation dimension, favouring males. Therefore, we can conclude that the hypothesis "There are statistically significant differences in the level of social interaction in children with Down syndrome according to the gender variable" was not supported. This result aligns with the study by Sami Al-Azzawi (2012) on social interaction among children in Riyadh from working and non-working mothers, which found no statistically significant differences in social interaction based on the gender variable.

7.4 Presentation and Discussion of the Fourth Hypothesis Results:

The fourth hypothesis states that "there are statistically significant differences in the level of social interaction in children with Down syndrome according to the degree of disability." To test this hypothesis, an independent samples t-test was used, and the results are presented as follows:

Table 6

Differences in the Level of Social Interaction According to the Degree of Disability Variable

Statistical Method Dimensions		N = 30				
		Mean (M)	Standard Deviation (SD)	t-value (t)	Degrees of Freedom (df)	Significance (p-value)
Communication	Mild	23.5000	1.60357	2.656	28	0.000 Significant
	Moderate	18.5909	5.08648			
Expectation	Mild	12.5000	1.19523	2.942	28	0.001 Significant
	Moderate	9.9545	2.31922			
Role Perception and Performance	Mild	18.8750	2.85044	2.070	28	0.021 Significant
	Moderate	15.4545	4.31749			
Meaningful Symbols	Mild	20.7500	2.71241	2.631	28	0.003 Significant
	Moderate	16.2273	4.54535			
Total Scale	Mild	75.6250	5.50162	2.889	28	0.000 Significant
	Moderate	60.2273	14.56327			

Based on Table 6, which presents the differences in the level of social interaction according to the degree of disability variable, it is observed that there are differences in the level of social interaction between children with mild and moderate disabilities across the overall scale and all its dimensions. This is reflected in the significant differences in the mean scores. Therefore, we can conclude that the hypothesis stating "There are statistically significant differences in the level of social interaction in children with Down syndrome according to the degree of disability" in favour of mild disability has been confirmed.

Conclusion:

Children with Down syndrome are considered part of society and fall within the group of individuals with special needs who require special care and attention in all physical, psychological, intellectual, and social aspects. Many studies have highlighted the sensitivity of this group, emphasising the importance of providing them with the necessary care and support. Social interaction is a fundamental way a child with Down syndrome can connect to the outside world and communicate with others. It also provides them with numerous experiences that help in acquiring social, linguistic, motor, and expressive communication skills. Furthermore, it contributes to learning new and varied behaviours that regulate their social relationships within societal values, customs, and traditions. Social interaction is an essential means of acquiring experience.

Given the importance of social interaction in the lives of children with Down syndrome, we aimed to investigate this topic to assess their level of social interaction under a set of variables, including age, gender, and degree of disability. To achieve this, a descriptive study was conducted on a sample of 30 children and adolescents with Down syndrome, aged between 7 and 18 years, attending the Medical Pedagogical Centre for Mentally Disabled Children - Esto - Oran. After applying the Social Interaction Scale developed by Nebras Mohammed Al-Murad, the study produced the following results:

- There is a high level of social interaction in children with Down syndrome.
- There are statistically significant differences in the level of social interaction in children with Down syndrome according to the age variable.

- There are no statistically significant differences in the level of social interaction in children with Down syndrome according to the gender variable.
- There are statistically significant differences in the level of social interaction in children with Down syndrome according to the degree of disability.

Based on the above, the current study concludes with a set of recommendations and suggestions, which are summarised as follows:

- Allocate recreational sessions, motor activities, and group activities within the centres that integrate children with social interaction deficits.
- Develop therapeutic programs by psychological specialists and educators at the centre aimed at enhancing the social skills and various abilities of children with Down syndrome.
- Pay more attention to activities involving games, as they ensure emotional release, enable behaviour modification, and provide opportunities for self-expression among peers and family.

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The Social Dimension of Translation and its Role in Bringing Cultures and Societies Closer Together

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Abstract :

This Article explores the vital role of translation as a cultural mediator, emphasizing its historical, social, and civilizational functions in fostering dialogue and mutual understanding between peoples. Beginning with the transformation of intellectual roles in traditional societies, it highlights how translation has historically served as a bridge for transferring knowledge, preserving cultural identities, and facilitating peaceful coexistence. The paper examines key concepts such as culture, cultural mediation, and the translator's role as an active agent in intercultural communication. Special attention is given to the Algerian context, where linguistic plurality and colonial legacies present unique challenges to translation and cultural policy. The study also addresses the translation crisis in Algeria, identifying systemic issues such as the lack of strategic planning, outdated educational curricula, insufficient cultural marketing, and weak institutional coordination. Ultimately, the research asserts that translation is not merely a linguistic task but a strategic and cultural necessity, especially in today's globalized and information-driven world. It calls for an updated vision of translation as a social act that supports cultural democracy, fosters integration, and ensures the sustainability of intercultural dialogue.

Keywords: communication, cultural mediation, mediation, role, culture, translation .

La Dimension Sociale de la Traduction et Son Rôle dans le Rapprochement des Cultures et des Sociétés

Résumé :

Cet article explore le rôle vital de la traduction en tant que médiateur culturel, en soulignant ses fonctions historiques, sociales et civilisationnelles dans la promotion du dialogue et de la compréhension mutuelle entre les peuples. En commençant par la transformation des rôles intellectuels dans les sociétés traditionnelles, il souligne comment la traduction a historiquement servi de pont pour transférer les connaissances, préserver les identités culturelles et faciliter la coexistence pacifique. L'article examine des concepts clés tels que la culture, la médiation culturelle et le rôle du traducteur en tant qu'agent actif dans la communication interculturelle. Une attention particulière est accordée au contexte algérien, où la pluralité linguistique et les héritages coloniaux présentent des défis uniques pour la traduction et la politique culturelle. L'étude aborde également la crise de la traduction en Algérie, identifiant des problèmes systémiques tels que le manque de planification stratégique, les programmes éducatifs obsolètes, le marketing culturel insuffisant et la faible coordination institutionnelle. En fin de compte, la recherche affirme que la traduction n'est pas simplement une tâche linguistique mais une nécessité stratégique et culturelle, surtout dans le monde globalisé et axé sur l'information d'aujourd'hui. Elle appelle à une vision actualisée de la traduction comme un acte social qui soutient la démocratie culturelle, favorise l'intégration et assure la durabilité du dialogue interculturel.

Mots-clés : *communication, culture, médiation culturelle, médiation, rôle, traduction.*

Introduction:

In traditional societies, intellectuals were those who knew how to read and write. With the development of societies, especially with the emergence of printing, the number of educated groups increased, expanding their knowledge and culture through the spread of books and literary and cultural councils. These intellectuals acquired diverse knowledge that was no longer limited to the religious or literary fields, as was previously common, but also shed light on new sciences such as law, medicine, and journalism, not to mention the openness to other cultures through translation. The Arabs have long recognised the important role that translation plays in human society through the exchange of cultures and ideas between different communities and the transfer of various sciences. It plays a cultural role in promoting communication between cultures, helping to overcome language barriers, which helps individuals learn about the traditions and civilisations of other peoples, thereby enhancing interaction and mutual understanding, strengthening relationships, and thus building social ties between nations, addressing the problem of social integration, and raising the banner of peace and security.

In order for the cultural mediator (translator) to play their role, they must be familiar with the culture of the society in which they live (its customs, traditions, prevailing values, etc.), as well as know how to communicate that knowledge (culture). Therefore, the central function of this intellectual was to play the role of a cultural mediator who seeks to facilitate relations between individuals in order to create positive relationships between people belonging to different cultures.

If we look back at history, we will find that thanks to translation, peoples have been able to communicate peacefully and

integrate socially within a framework of respect for cultural diversity. It has also contributed to the preservation and maintenance of the cultural identity of society, as it has been translated into other languages. In addition, through translation, we can learn about ancient civilisations and work to preserve their identity and prevent them from disappearing, so that they remain immortal in human history and so that everyone can learn about them and revive them.

Based on the above, it can be said that translation as a cultural mediator is a process of communication that enables people to become intellectually open, allowing them to accept other cultures with flexibility, and contributes to dealing with the problems and difficulties caused by linguistic differences. This leads us to ask some questions about the actual nature of translation and what role translation plays as a cultural mediator that contributes to building cultural bridges and communication between societies.

1. Definition of concepts

1.1. Definition of Translation:

Before addressing the definition of translation, we will discuss the phenomenon of immigration, which has transformed Italy into a multicultural country where people of different religions, languages and cultures live together. Understanding others in terms of their historical, religious and cultural realities is one of the most important factors leading to peaceful coexistence.

The only text on immigration describes the cultural mediator as an effective element of social integration policies, indispensable in helping new citizens and facilitating their integration through mutual acquaintance in order to ensure equal opportunities and respect for others. The cultural mediator finds himself faced with the challenge of integration policies and the

importance of acknowledging differences and overcoming fears and prejudices in order to avoid racial discrimination and achieve peaceful coexistence.

We also find that translation has been of interest to Arabs since ancient times. We find the House of Wisdom, which is a library that provides the necessary tools to aid translation, and the Baghdad School, which was the largest centre for translation, containing some philosophical and Greek books brought by the Abbasid Caliph Harun al-Rashid from the Roman Empire. Caliph al-Rashid worked on translating these books from Greek into Arabic, in addition to making available other books such as Persian heritage, which he also had translated from Persian into Arabic. Translation was not limited to one field, but came to encompass various fields of knowledge and sciences that flourished in ancient civilisations.

Translation is derived from the verb 'translate', and as stated in *Lisan al-Arab*, 'he translated his words, meaning he interpreted them in another language.' (Ibn manẓūr, 1998 :316)

Translation is defined as 'the transfer of words, meanings and styles from one language to another while maintaining equivalence.' (Kuḥayl, Saʿīdah: 21)

Based on what has been presented, translation is the process that allows the transfer of meanings to be translated from the source language to the target language, which requires the translator to have the ability to control both languages, respect the target language system, and understand their cultures, as this point is considered one of the most important conditions that must be met in the cultural milieu, It requires an understanding of the text to be translated, which can only be achieved by evoking the cultural atmosphere in which it appeared. (Zarmān, Muḥammad ,2001:117-118)

In the words of Nasif Abdul Karim: "Translation was and still is the most important means of achieving communication between peoples. Since humans discovered the alphabet, achieving a historic leap in the field of development, and since they began to write down what they knew and record their history and ideas, translation has been the direct counterpart of that development. Humans are a connected chain of links bound together by language, and the twin of that bond is translation. Hence, we find that translation is a cultural necessity and a social and cultural activity of great importance in completing dialogue and communication, as it is considered a bridge for the passage of cultures between different societies.

When discussing the role of translation, we find that it is not limited to transferring text from one language to another, but also works to promote cultural and social communication between different peoples and civilisations. Accordingly, we find that there are multiple definitions of translation among specialists, sometimes intersecting in the same ideas and sometimes differing and varying. Hence, it can be said that translation is a tool for dialogue between cultures, as it serves as a bridge to achieve communication and understanding between people of different cultures by providing an interactive platform to facilitate dialogue between them.

1.2. Definition of Culture:

The real power in modern society is manifested through the cultural sphere. To confirm this, we find that many European countries have adopted a policy that has crystallised into a constitutional preamble stipulating that the nation guarantees children and adults equal access to education, vocational training and culture. UNESCO has also stated that culture is the fourth pillar of sustainable development.

Therefore, European countries are striving to establish the foundations of cultural democracy, which means that culture is accessible and not limited to the elite or a specific segment of society, and to make culture available to populations that suffer from problems of access and availability. In doing so, they are addressing the idea of social isolation in democratic politics under the slogan of 'equal access to culture.' The root of the word 'culture' in Latin is 'cultura,' which means the cultivation of fields or livestock. The word 'culture' in French appeared in the 16th century to denote the act of cultivating the land (*la culture de la terre*). The semantic content of the word then began to be influenced and developed with the evolution of ideas, shifting from the meaning of cultivating the land to the meaning of cultivating the mind. The word became firmly established in the thinking of the French Enlightenment and was associated with ideas of progress, development, education and reason, leading to its adoption in various languages, such as German (*kultur*) and English (*culture*). (BENETON Pierre, 1975 : 15)

Edward Taylor, a British anthropologist, was the first to propose a conceptual definition of culture, stating that culture is the complex whole of beliefs, knowledge, art, morals, customs, and habits acquired by humans from the society in which they live as part of it.

Based on what has been proposed, we find that the subject of culture has become a topic of interest to many scholars. Some believe that culture is the complex whole that includes knowledge, beliefs, arts, and customs acquired by individuals as members of society, while others believe that culture is the manifestation of actions and ideas expressed by humans through the use of symbols or language. Culture is thus the accumulated history of humanity, which carries a set of charac-

teristics that can be summarised as being human, i.e. specific to humans and not to other creatures. It is also acquired, either directly or indirectly, through learning or through interaction between individuals. It also has the characteristic of transmission and dissemination thanks to language and modern means of communication, where it has become easy to learn about other peoples' cultures while sitting at home, considering that the world has become a small village.

We have become more open to the cultures of other societies. In addition, culture is evolutionary, meaning that it develops for the better and better, as well as being changeable and predictive, in the sense that it can determine the behaviour of individuals and predict how a particular individual belonging to a particular culture might behave.

2. Cultural Mediation:

To arrive at a definition of cultural mediation, we must distinguish between the concepts of mediation and cultural mediation. Disagreements and conflicts are part of our lives and have existed since the beginning of time. The first conflict was between Abel and Cain, which shows that they have existed since ancient times. They are also one of the results of human interaction, in which there are differences in opinions, values and goals. The idea of applying mediation to resolve existing disagreements and conflicts between parties and groups in peaceful ways came about. Mediation means that there is a dispute between two or more parties, and the mediator is the third party who works to resolve this dispute and reach peaceful solutions that satisfy both parties. In addition, it is voluntary, i.e. not compulsory, and individuals resort to it of their own free will. It requires a number of conditions, including the existence of a high level of conflict, weak incentives to reach an agreement, and unequal power between the parties to the conflict.

Here, the mediator has a role to play in helping to defuse anger and create an atmosphere conducive to negotiation. The mediator focuses on the interests of the disputing parties and uses active listening techniques (being a good listener enables him to understand and analyse the situation well), in addition to motivating the disputing parties to reconcile by alerting them to the consequences of not reaching an agreement. Cultural mediation refers to the process of bringing culture and the arts closer to citizens. It is a broad concept that includes activities related to cultural democratisation projects, which aim to encourage cultural projects and improve access to culture in order to achieve cultural democracy, which means making culture accessible to all segments of society, not just a select few. It also aims to facilitate relations between nationals and foreign citizens in order to create friendly relations and support peaceful coexistence. All of this requires the presence of a cultural mediator who must possess a set of qualities such as the ability to engage in dialogue, active listening, and knowledge of the host country and the country of origin, in the sense of mastery and control of everything related to culture, laws, traditions, language, customs, etc.

Among the goals that cultural mediation seeks to achieve are strengthening education, diversity, equality, and respect for differences, in addition to encouraging cultural exchange programmes and facilitating understanding and dialogue between people from different cultures, cooperating to encourage social change aimed at eliminating racial discrimination and developing social relations between cultures. From the above, we find that mediation is a mechanism for resolving conflicts peacefully, while cultural mediation does not aim to resolve any conflict but rather aims primarily to bring culture and the arts closer to citizens.

3. The Role of the Translator:

The translator plays a fundamental role in facilitating understanding, revealing and interpreting meanings, and attempting to convey cultural messages and their meanings, which requires the translator to exercise control and mastery in the translation process.

Translation is not an easy process, which means that translators face many difficulties in understanding the text and conveying its socio-cultural content without distorting its original meaning. Here, they find themselves faced with two choices: the first is to hold on to and preserve their own culture and distance themselves from other cultures instead of drawing from them, or to be open to the culture of others and borrow from it. This is what Fenotti referred to as the disappearance of the translator, where he merges and assimilates into the other culture, which brings us to the term acculturation, which means that when members of a group move from their group to live in another group, they face a process of cultural change called cultural change, because they encounter a culture that is different from that of their own society. In other words, we find that the cultural characteristics of the new culture overwhelm or replace the mother culture, and individuals may lose their original culture.

Therefore, we find that the translator plays an effective role in cultural transfer. Talking about culture as a social phenomenon means that it is a product of society and is not formed as an individual phenomenon, which requires the existence of a society through which individuals can form and develop their culture through social interaction with others within the society. And strive to overcome the gaps that prevent the transfer of meaning to the other party by accessing their culture. Here, we introduce the term 'democratisation of culture,' which aims to improve access and encourage cultural projects, thus trans-

forming the translator from a mere mediator between two cultures to an active member in the transfer of their contents. This is achieved by transferring culture in a correct language that ensures the preservation the correct meaning. This requires proficiency and mastery of several languages and a broad view of the target culture, thereby enabling the translator to create cultural communication through translation.

4. The Translator as a Cultural Mediator:

Translation is as old as humanity and its civilisation, which practised this intellectual activity, whether oral or written, as an effective tool in the process of transferring knowledge and serving dialogue and creativity. In the past, sailors, merchants and princes used translation for trade and politics, while clergymen worked on translation for the sake of preaching and proselytising. Intellectuals then came along and used translation to spread ideas and open up to other sciences and cultures. Considering that translation is the bridge through which cultures cross, the translator is the person who receives those cultures, guides them, and even leads them to safety on the other side. Translators, as described by Marianne Lederer

The role of the translator is centred on being a mediator between cultures, in the sense of mediating between ideologies within a framework of respect for cultural diversity and acceptance of the other as they are, and between social values and political and social structures, in order to overcome the difficulties that hinder the transmission of meaning.

This requires the translator to have a high degree of cultural and linguistic competence, in addition to a knowledge of a range of arts and sciences, given that each society has its own language and mental constructs. The translator's job is to leave the same impression that the original text leaves on its original

readers, meaning that the original meaning of the text must remain intact. This can only be achieved through mastery and good command of the language and culture of the target country, in addition to working to exclude personal standards and relying on understanding the text and preserving the original text, as the translator is a mirror reflecting this text and its culture. (HATIM, Basil, 1990 : 223)

5. Translation and its Role in Cultural Communication Between Peoples:

The process of translation is not a secondary activity limited to a linguistic criterion, manifested in the fact that it is a process of transferring from one language to another, as is commonly believed. Rather, it has transcended its classical technical essence to become a central practice that involves theoretical, cultural, economic and social aspects. It has become one of the mechanisms used since ancient times to enable nations and peoples to coexist, especially since it enjoys a distinguished position thanks to its effective and significant contribution to understanding others and opening up to them and their cultures.

Translation is therefore considered one of the most important means used to create this cultural and civilisational interaction that enables peoples to benefit from each other, as it is a 'source of energy for creation and creativity... as well as openness, listening, dialogue and interaction with others'. (HATIM, Basil, 1990 : 223) Therefore, the more translation from one language to other languages increases, the more cultural richness in human civilisation in general increases, because through it, paths are opened to learn about other cultures and their customs and traditions, and then benefit from them and their experiences in all fields.

Translation continues to play an important role in the dialogue between cultures and civilisations, as it is the main tool

for the advancement of civilisations. Thanks to it, people can learn about the cultures of other countries without travelling, while remaining in their own countries, where they form ideas about the history and civilisation of these countries, not to mention the accumulation of knowledge and science, which is transmitted from one country to another. This leads to interaction, through which one culture understands another, resulting in exchange, advancement and development. This may bring about understanding between the peoples of the two civilisations, leading to harmony and peace (peaceful coexistence). (al-‘Aqqād, ‘Abbās Maḥmūd, 1998: 32)

One of the fundamental objectives of this cultural mediator (translator) is to expand the scope of cultural democracy, which means that culture is not limited to the elite or a specific segment of society, but rather seeks to spread it to different segments of society, so that it includes all individuals in all regions. It also aims to help break down linguistic, cultural and social barriers and support coexistence in a culturally diverse society.

Translation, as a bridge for communication between peoples throughout history, brings different cultures closer together and promotes cultural convergence between nations. In doing so, it supports dialogue and exchange between peoples, facilitates communication between nations, and opens windows onto other cultures for peoples, as long as knowledge of the other gradually leads to self-knowledge through comparison and communication.

In addition, translation works to protect culture and its values and preserve them from disappearing and dissolving in the creeping tide of civilisation with its technologies, material values and lifestyles, and to facilitate relations in order to create positive relationships between people belonging to different

cultures. Thus, it can be said that translation from one language to another is one of the windows through which people view other peoples' cultures, civilisations and information, and it is one of the bridges that connect cultures and human knowledge. The role of translation is growing in our present age, which is witnessing an information explosion and significant technological development that we must keep up with and keep pace with in a world full of new information and data generated by numerous and diverse changes. This requires us to contribute to cultural development as active and interactive participants who are open to other cultures, while taking care to preserve our original culture and not allow its roots to be uprooted.

Therefore, translation has been, is, and will continue to be a tool that allows for human interaction through the exchange of cultures, knowledge, and science, thereby providing an opportunity for cultural and civilisational communication between peoples, transcending political and geographical barriers. It addresses the problem of social isolation, especially as we are witnessing an information technology revolution in which translation is one of the main tools. Without it, peoples would remain isolated until they withered and disappeared. Translation has a place among the sciences and is one of the interactions between human beings. From what we have mentioned, it is clear that translation is an attempt to understand others, communicate with them, and learn about them. It is a reciprocal process that ultimately leads to cultural exchange, civilisational dialogue, and knowledge transfer.

6. The Linguistic and Cultural Reality in Algeria:

Freedom of cultural expression is a legitimate right for different cultures, and Algeria, like other countries around the world, is trying to promote communication and bring together the customs and traditions of its citizens, regardless of their

religious affiliations. Translation plays an effective role in facilitating the process of building bridges of communication internally and externally. In terms of linguistic identity, Algeria still faces several obstacles. The official and national language, and the language of the state, is Arabic, but the language actually used is French. Algeria is the third most Francophone country in the world after France and Congo, according to a study conducted by the French Language Observatory in 2010, which estimated the number of French speakers in Algeria at 11.2 million. We often find that French speakers, who are not few in number, boast about this language and see it as a sign of openness and sophistication, both inside and outside the country.

Recently, Amazigh has become an official national language, although it still suffers from several problems regarding its alphabet and spelling. However, this does not negate the fact that it brings together many diverse cultures, including the Kabyle, Chaouia, Mزاب, Tarika, Chnaoui of Tipaza, and the Bosmgunia Shalouh in Beida. This poses a major challenge for Algeria in terms of which language to use for writing, and what role translation will play in all of this. Algeria must therefore define a clear strategy in this area.

7. The Translation Crisis in Algeria:

When discussing translation in Algeria, researchers and scholars in this field point to the existence of a translation crisis, as well as the need to adapt translation studies to the Algerian reality. We urgently need to understand the most important difficulties and challenges posed by the cultural market and the requirements of our institutes and universities. To date, we have:

- Working on studying the strategy and importance of translation: a strategy that is imposed and not adapted to the local reality. (Sahābat Khayrah,2019: 130)
- Renewing language and translation teaching curricula in terms of content rather than form, in line with the requirements of the cultural market, where reviewing teaching curricula has become an inevitable necessity and every effort must be made to align these programmes with the requirements of the labour market.
- The problems faced by authors, which have contributed significantly to the obstruction and suspension of many translation projects each year.
- Focusing on finding consumers and improving cultural marketing. At this particular point, it is necessary to take into account the needs of the market, meaning that production should be in line with market needs, which are determined by studying the tastes of the public in advance. Studies and statistics have shown that large segments of the population do not benefit from cultural offerings because they are not targeted, which means that achieving cultural democracy lies not only in enriching cultural offerings but also in continuous and purposeful work focused on demand.
- -Lack of coordination between institutes and laboratories specialising in languages and translation. Coordination is essential and important in order to achieve satisfactory results that are always in the interest of both the producer and the consumer (the author and the recipient).

Here, we can propose the basic elements for a successful cultural mediation policy. At present, cultural mediation is the key and means of bringing culture to populations that suffer from problems of access and availability. It thus addresses the idea of social isolation in democratic politics and eliminates the idea

or phenomenon of limiting the world of culture to an elite class resulting from cultural (differences in learning), social and economic (poverty), psychological, geographical and linguistic (disability) conditions.

We can also attribute the reason to the weak financial support directed to translation, for example: The project to translate young people's books, which was adopted by the Arab Higher Institute for Translation, was halted due to the absence of financial support, as approximately 20 young people's books were translated and remained locked in drawers indefinitely.

Accordingly, the origin of the translation crisis in Algeria can be traced back to the absence or absence of a clearly defined strategy in the field of translation at the state level, as well as at the level of universities, institutes and scientific research centers, and the lack of coordination between them.

Conclusion:

The relationship between translation and culture is strong, as culture is the product of expressing the collective identity of a group of people, and translation is the way that enables us to reveal, learn and understand the cultures of past peoples. It serves as a bridge to achieve communication and break the barrier of ignorance, where it was Translation is still a source of communication between nations and cultures, as it leads to increased understanding and communication between individuals and societies by translating the works of others (various cultures and languages). Translation has witnessed many transformations since the 1980s, when a shift was made towards cultural translation practice. Translation is no longer limited to Translating works and texts alone, but has become a social ac-

tor and cultural friction between multicultural societies This has opened the way for scrutiny and research in cultural translation to solve the problems of cultural differences, which raises several problems, the most important of which is the issue of translating elements with a cultural load and transferring them to the other side of the mechanisms that societies have adopted since the beginning of their first formations, meaning that through them a greater opportunity is provided for the exchange and generation of ideas. New ones that support the structure of human civilization in general, despite its different backgrounds, as well as the formation of an appropriate space for dialogue and acculturation Because it is considered one of the basic and effective engines in producing this interaction and coexistence that links these human cultures, or rather it is an absolute necessity for development, growth, and the exchange of ideas and achievements. There is no civilization in history that has not been taken from other civilizations.

At the conclusion of this research paper, which aims to activate and shed light on the role of translation as a cultural mediator and to determine the great importance it has in light of the current challenges, the world today is experiencing cultural openness. The local translator must be in control and have a broad and comprehensive knowledge of global terms: such as dialogue of civilizations, dialogue of cultures, multilingualism, and cultural expression.

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The Chinese Experience in Startups Support: Current Situation and Prospects

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Abstract:

This research paper aims to study and analyze the current situation and prospects of supporting startups in the People's Republic of China in order to evaluate the success of the Chinese experience in the management and operation of this sector. This research is based on the descriptive approach, as it helps in the description and analysis of the outcomes of the Chinese public policy in supporting and promoting the startup sector, as well as the institutional performance evaluation approach to assess the performance of startups in China.

This work concludes that the recently adopted Chinese policies and strategies have focused largely on supporting startups specializing in biotechnology industries, as enshrined in the "Little Giant" program, in addition to companies that are dedicated to artificial intelligence. This has contributed to enabling many startups, most notably Deep Seek, to gain the ability to compete with global leaders in the field of artificial intelligence.

Keywords: Startups; Little Giant Program; Deep Seek; Artificial Intelligence; Chinese Policy.

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L'expérience chinoise en matière de soutien aux start-ups : situation actuelle et perspectives

Résumé :

Cet article de recherche vise à étudier et analyser la situation actuelle et les perspectives du soutien aux start-ups en République populaire de Chine afin d'évaluer le succès de l'expérience chinoise dans la gestion et le fonctionnement de ce secteur. Cette recherche s'appuie sur une approche descriptive, car elle aide à décrire et analyser les résultats de la politique publique chinoise en matière de soutien et de promotion du secteur des start-ups, ainsi que sur une approche d'évaluation des performances institutionnelles pour évaluer les performances des start-ups en Chine.

Ce travail conclut que les politiques et stratégies chinoises récemment adoptées se sont largement concentrées sur le soutien aux start-ups spécialisées dans les industries biotechnologiques, comme le prévoit le programme « Little Giant », en plus des entreprises qui se consacrent à l'intelligence artificielle. Cela a contribué à permettre à de nombreuses start-ups, notamment Deep Seek, d'acquérir la capacité de rivaliser avec les leaders mondiaux dans le domaine de l'intelligence artificielle.

Mots-clés : *Start-ups ; programme Little Giant ; Deep Seek ; intelligence artificielle ; politique chinoise.*

Introduction:

The People's Republic of China is one of the most important global economic powers of the 21st century, thanks to the sound public policies it has adopted to reform and develop various sectors, most notably the economic sector. Startups occupy a significant position in the development of the economic system, as they represent a source of diversified products and services that meet local and international needs, particularly in terms of their compatibility with the technological and knowledge revolution, most recently artificial intelligence. This has made this type of enterprise a major focus of interest for Chinese public policymakers, embodied in the effort to provide a suitable environment that helps these enterprises achieve their goals, particularly those related to gaining the ability to compete in international markets, and thus contribute to the development of the national economy. From this perspective, This work is an attempt to explore the most important mechanisms adopted by the Chinese government to support start-ups and evaluate the major outcomes of this process, including the main significant results achieved by Chinese start-ups.

Research Problem:

To which extent the chinese government contributed to the development of Startup sector?

Sub-questions:

The research problem can be divided into the following questions:

- 1) what is the importance of the mechanisms that are applied by china to promote the sector of Start-ups?
- 2) What are the drivers of the chinese focus on Startups?

- 3) What are the outcomes of the Chinese startup support policy?

Hypotheses:

As a preliminary answer to the problem at hand, the following hypotheses are formulated :

- 1) Startups are considered as a modern model for reforming and developing the economic sector in China.
- 2) There is a relationship of influence and impact between the People's Republic of China's adoption of a startup support policy and the enhancement of the production level of biotechnology and artificial intelligence models.
- 3) The greater the level of support for startups in the People's Republic of China, the greater the development level of biotechnology and artificial intelligence models.

Significance of the Study:

This study's importance is reflected in:

- Defining the general meaning of the term "start-ups."
- Identifying the most important factors that have prompted the People's Republic of China to strengthen its startup support policy.
- determining the main modern mechanisms adopted by the Chinese government to support startups in the fields of biotechnology and artificial intelligence.
- Evaluating the performance of Chinese startups in the fields of biotechnology and artificial intelligence.
- Introducing the recent Chinese experience in supporting startups and marketing their most important outputs, with the aim of contributing to providing modern models and mechanisms that help support and strengthen the startup sector in Algeria.

Methodology:

The nature of the research problem of the current study needs certain methods and approaches that help in analyzing and addressing it.

Therefore, the study relies on a descriptive method by employing the descriptive approach, as it helps to describe and analyze the study variables and determine the nature of the relationship between them. Some approaches related to the nature of the study topic are also used, such as the institutional performance evaluation approach, as it is necessary to evaluate the performance of startups in the People's Republic of China in the fields of biotechnology and artificial intelligence.

Study Plan:

To analyze and address the research problem and verify the validity of the hypotheses mentioned above, the work is divided into three parts:

- **Part One:** The conceptual framework for startups.
- **Part Two:** Supporting startups in the field of biotechnology industries – the Little Giant Project as a model.
- **Part Three:** The Actual situation of startups in the field of artificial intelligence, DeepSeek, as a model.

1. The Conceptual Framework of Startups

There is no doubt that startups reflect a modern economic trend or strategy prevalent in many countries that adopt a capitalist approach with the goal of developing the economic structure, first and foremost, and then the ability to develop the political and social structure, secondarily. This makes the startup model important on both a scientific and practical level. Ac-

cordingly, some data will be presented that enables to understand the conceptual framework of startups.

1.1. Definition of Startups (Startup)

According to the English dictionary, a startup is defined as: "...a small project that has just begun. The word 'start-up' consists of two parts: 'start,' which refers to the idea of launching, and 'up,' which denotes the strong growth" (Hussein et Sadiki 2021, 70).

The term startup began to be adopted immediately after World War II, with the actual emergence of venture capital firms, and the term subsequently became widespread (Mimouni , Boukataya et Basouih 2021, 405).

Professor and entrepreneur Steve Blank defines startups as not a miniature version of large corporations, but rather as companies that move from failure to failure rapidly until they finally reach success. They continually learn from customers, which enables them to adapt (Hussein et Sadiki 2021, 70).

Paul Graham, founder of the Y Combinator incubator, also defined them as: "A company designed to grow rapidly" (Taibi et Lamri 2021, 504). According to Graham, good growth is between 5 and 7 percent per week, and may reach 10 percent in exceptional cases (Targhini 2020/2021, 5).

It can also be defined, according to Eric Ries in his book *The Lean Startup*, as follows: "A startup is a human entity designed to create a new product or service under conditions of extreme uncertainty" (Ben Ayad 2022, 159).

There is also a definition provided by Neil Blumenthal, who helped found and manage the sunglasses retailer Warby Parker, which states that startups are companies working to find a solution to a problem where it is unclear how it can be solved and the success of this solution is not guaranteed (Talat 2023).

1.2. Characteristics of Start-ups

Start-ups are characterized by many unique characteristics that distinguish them from other companies, perhaps the most important of which are the following:

1.2.1. Modernity:

Start-up businesses are characterized by being new and young, and they have two options: either develops and achieves success, or closes their doors and suffers losses (Hotmart Platform 2019).

1.2.2. Gradual, increasing Growth:

Among the characteristics that define a startup is its ability to grow rapidly and generate revenues much faster than the costs it requires to perform its work. This means that a startup has the opportunity to rapidly scale its business, i.e., increase production and sales levels without increasing costs. This results in significant growth in the organization's profit level. Therefore, startup businesses are not limited to achieving small profits due to their being newly established institutions. On the contrary, they have the potential to achieve significant levels of profit (Hotmart Platform 2019).

1.2.3. Reliance on Technology:

One of the characteristics that distinguish startups is that their businesses are based on innovative ideas. Therefore, they focus on meeting market needs in smart and modern ways. Therefore, reliance on technology is one of the key elements that startup founders take into consideration. This is the process through which they seek to enhance the level of growth and progress of the organization, as well as obtain greater

funding opportunities through electronic platforms and support from business incubators (Hotmart Platform 2019).

1.2.4. They are low-cost organizations:

A startup requires minimal operating and production costs compared to the profits it generates, and these profits are usually generated quickly and somewhat suddenly (Hotmart Platform 2019).

1.3. Stages of Establishing a Startup

There are a number of stages that startups go through during their establishment process, the most important of which are listed below (Majarra s.d.):

1. Validating the idea: It is very important to test the effectiveness of the idea before investing in it, as the idea may be unrealistic.
2. Having a co-founder: Having more than one co-founder usually contributes to increasing the likelihood of success of the startup.
3. Developing the business model: This means working to develop the final structure based on which it is clear how to implement the idea on the market level and, consequently, the ability to generate profits.
4. Setting the business plan: The business plan must include a comprehensive explanation of the organization's activities and the tasks and responsibilities of each department and employee.
5. Branding the idea: This is the process through which the idea is branded and transformed into a trademark, which provides a clear identity for the project.
6. Official registration of the establishment: The establishment must be officially registered with government

agencies to facilitate its operation in the market and preserve property rights.

7. Searching for secure sources of funding: This is one of the most important and a difficult stage, as the success of this process affects the success of the entire project idea. Therefore, careful consideration must be given to choosing the right financier and communicating with them correctly.
8. Launching stage: This is the stage in which the establishment begins to implement its activities effectively after securing appropriate funding.

Based on our discussion of the conceptual aspects of startups, it can be argued that this type of organization represents a strategy with economic, social, and political dimensions aimed at achieving comprehensive and sustainable development.

2. The Chinese Experience in Managing and Operating Startups

The significant and unlimited expansion of Chinese economic institutions across various international markets is an indicator of the significant level of economic development achieved by China, on the one hand. On the other hand, it reflects the great importance China places on investment and entrepreneurship policy, embodied by the ongoing efforts of official and unofficial decision-makers to develop and implement strategies that enable the enhancement and development of the performance of all commercial institutions, particularly startups. From this perspective, the focus of this study will be on the Fast Capital digital business incubator and its policies for supporting and developing startups. The second phase, is dedicated to address the modern strategy adopted by the Chinese govern-

ment to develop the startup sector, represented by the "Little Giant" program.

2.1. Faster Capital Digital Incubator and its Policies for Supporting Startups in China:

Faster Capital is a digital incubator for startups in the People's Republic of China. It supports and incubates startups by providing a range of services, including technical and business development, and providing financial support in exchange for equity shares at the startup level (Faster Capital Business Incubator s.d.).

Among the services provided by the Faster Capital Business Incubator to startups in the People's Republic of China are the following:

2.1.1. Services related to the field of financial technology (Faster Capital Business Incubator s.d.):

The most important services included in this field are:

- Raising capital for financial technology startups.
- Technical development for financial technology startups.
- Searching for sales and marketing consultants for financial technology startup products.
- Searching for investors and mentors in the field of financial technology.
- Starting the startup in financial technology-related activities.

2.1.2. Support for technical startups (Faster Capital Business Incubator s.d.):

Support is provided to technical startups by focusing on the following elements:

- Raising capital for technology startups.

- Finding a technical co-founder and a technical team for technical startups.
- Searching for angel investors or venture capitalists, and finding sources of funding for technical startups.
- Providing technical consultants, as well as sales and marketing specialists, for these institutions' products.
- Searching for investors and mentors in technology fields.
- Starting the startup in technology-related activities.

2.1.3. *Supporting startups specializing in educational technology (Faster Capital Business Incubator s.d.):*

Services provided to this type of organization include:

- Raising capital for startups specializing in educational technology.
- Providing a co-founder and a technical team for this type of startup and building the product or application.
- Searching for angel investors, venture capitalists, or other funding sources for educational technology.
- Providing technical advisors and experts specializing in sales and marketing for educational technology startups.
- Searching for investors and mentors in the educational technology field.
- Starting the startup in educational technology-related activities.

2.2. Newly adopted strategies to support emerging companies in China - the "Little Giant" strategy as a model:

As a result of the sanctions imposed by the US President Donald Trump on a group of Chinese giant companies, including Huawei, Semiconductor Manufacturing International

Corp., which prevented them from purchasing vital American products such as chips, industrial software, and smart device operating systems, these sanctions constituted a major impetus for the Chinese authorities to move towards achieving autonomy in vital industries such as those mentioned above (Elaph 2022).

China has launched support for local emerging companies under the slogan "Little Giant," a title granted to emerging companies that submit an application that includes details related to the following elements (Elaph 2022):

- The financial status of the company.
- The number of patents it has filed.
- The number of research projects the institution has completed.

The criteria used to select the institutions that receive the title of Small Giant are linked to the needs of the local markets of China. The institutions chosen are those whose work aligns with the current pressing policies of the Chinese government (Elaph 2022). This was confirmed by Professor Barnawton, a professor of Chinese economics at the University of California, who said, "It is clear that the selection of these companies is driven by China's specific industrial needs and policies. The companies are chosen not only because they are good companies, but also because they fit the urgent policy needs of the government at the moment" (Al-Riyadh Newspaper 2022).

Li Kai-fu is the founding director of Sinovation, a private equity firm that developed the Little Giant program with the blessing of Chinese President Xi Jinping. This program has become a key component of China's strategy to rebuild its technology industries and address some of the problems resulting from China's adoption of the American Silicon Valley model, which has enabled investors and entrepreneurs to achieve their ambitions with minimal government oversight. This has neces-

sitated curbing the growing power and influence of a group of Chinese giants that have begun to influence multiple levels, such as e-commerce company Alibaba, social media platforms like Tencent Technology, and ByteDance, owner of the global social media app TikTok. This policy can be viewed as an incentive to adopt startups focused on light and medium-sized technology industries to meet local needs, while simultaneously controlling their influence to encompass their areas of expertise and operational objectives, rather than impacting other sectors (Elaph 2022).

To support the Little Giant program, the Chinese government has taken a series of important measures, including the following:

- Diverting resources and capabilities related to the technology sector toward more strategic areas, such as microchips and large applications.
- Adopting policies that encourage talent attraction to investment in the strategic biotechnology sector, such as providing loans and tax reductions.
- As for the number of startups awarded the "Micro-Giant" title, the Chinese Ministry of Industry and Information Technology has awarded 4,762 startups the title since 2019 (Elaph 2022).

In January 2022, the Chinese Ministry of Finance allocated an estimated 10 billion yuan to finance small and medium-sized enterprises (Al-Riyadh Newspaper 2022).

At the provincial level, no more than 10 companies will be selected for this title, while the major economic cities of Beijing, Shanghai, and Shenzhen would each have 17 Micro-Giant candidates (Elaph 2022).

Therefore, it can be said that the economic policy recently adopted by the People's Republic of China, related to the Little

Giant Program, is a strategy with several dimensions, the most important of which is confronting external sanctions, particularly those of the United States, by building economic institutions focused on vital technological industries that were previously limited to the American market. This enables self-sufficiency, as well as entry into global markets and competition with major international companies, particularly American ones, that dominate this field of technological industries (Elaph 2022).

3. The Reality of Emerging Institutions in the Field of Artificial Intelligence, DeepSeek as a Model

Artificial intelligence is one of the most important outcomes of the technological revolution witnessed in the last three years of the 21st century. It has become a key player in the management and operation of various sectors, particularly those of an economic nature. This is due to its contemporary characteristics, primarily represented by the accuracy and speed of responding to and processing various inputs, transforming them into outputs that meet the needs of individuals, groups, and institutions and keep pace with current and future challenges.

Recent advances in deep learning have produced artificial intelligence systems capable of matching or even surpassing human intelligence in some key functions. However, achieving "artificial general intelligence," or the level at which machines can perform the full range of cognitive tasks capable of being performed by the human mind, will still require decades. However, many machine learning systems have already been developed for specific commercial uses, and their applications are extremely diverse. They are capable of providing customer service, managing logistics, monitoring factory equipment, rationalizing energy consumption, and analyzing Medical records. Recent research conducted by the McKinsey Global Insti-

tute (MGI) has confirmed that machine learning technologies are widely applicable to virtually all industries (McKinsey Global Institute 2017, 3).

In China, research and applications related to artificial intelligence (AI) began to emerge in academia in the late 1970s. In March 1986, the Chinese government launched the "National High-Tech Research and Development Program," also known as the "863 Program." This program included a significant topic in the information technology field, namely the "intelligent computer," coded "306-863." Thanks to in-depth research on this topic, the People's Republic of China has achieved numerous significant research achievements in various fields, including high-performance computers, intelligent interfaces, and intelligent applications. It has also created a large pool of skilled personnel in these fields, which has contributed to laying a solid foundation for the development of AI (Trends Research & Advisory 2025).

According to statistics provided by the AI Index regarding the source of prominent AI models in 2024, the United States led the field with 40 prominent AI models, followed by China with 15, and then France with three (Stanford University Human-centered Artificial Intelligence 2025, 46).

All of this has constituted a major incentive for the People's Republic of China to focus on the field of scientific research and, consequently, the ability to compete in international markets in fields related to modern technologies, most notably artificial intelligence. It is found that 23.2% of global AI publications are produced in the People's Republic of China, and 22.6% of global AI research citations are from China (Stanford University Human-centered Artificial Intelligence 2025, 7).

Accordingly, artificial intelligence has become one of the most important variables that has received increasing attention

among emerging institutions in the People's Republic of China, especially in late 2024 and early 2025. This is aimed at keeping pace with the rapid developments witnessed by many countries seeking to expand their influence in international markets, most notably the United States.

3.1. Evaluation of the chinese process of supporting and promoting artificial intelligence

The People's Republic of China and the United States are currently international leaders in the field of artificial intelligence development. In 2015, they published approximately 10,000 research papers on artificial intelligence in academic journals. In contrast, the United Kingdom, India, Germany, and Japan combined published only approximately half of this number of scientific articles (Mckinsey Global Institute 2017, 5).

The People's Republic of China has adopted a strategy to support AI startups. It is explained as follows:

3.1.1. Early Preparation Phase – before the beginning of 2017:

This phase saw the issuance of several administrative documents by the State Council, primarily: "Guidelines for Promoting Orderly and Healthy Development of the Internet of Things," "Guidelines for Effectively Promoting Internet+ Measures," and "Notice on the Action Plan for Promoting Big Data Development." These policies have enabled several organizations, including DeepBlue Technology, SenseTime, and Cambricon, to quickly benefit from the development of the AI industry, providing an incentive for entrepreneurship in this field in the People's Republic of China (Trends Research & Advisory 2025).

3.1.2. Acceleration Phase (2017–2020):

At the beginning of this phase, the State Council issued policy documents that included mechanisms to stimulate and regulate AI development, such as the "Next Generation AI Development Plan," in addition to guidelines promoting the expansion of AI integration with the economy, such as the "Guidelines for Promoting Deep Integration between AI and the Real Economy" (Trends Research & Advisory 2025).

A national AI development strategy was adopted, with the primary goal of achieving global leadership in AI theories, technologies, and applications by 2030 (Trends Research & Advisory 2025).

In an effort to promote research, development, and the application of AI technologies, the Ministry of Industry and Information Technology issued the "Action Plan for the Development of the New Generation AI Industry (2018-2020)." The plan included three main axes: establishing AI research institutes, promoting basic research and development of applied technology, and accelerating talent development. All of these measures contributed to the emergence of numerous startups, which helped improve and develop the entire AI industry chain (Trends Research & Advisory 2025).

3.1.3. Industrial Implementation and Organized Management Phase -2020 to date:-

During the Fourteenth Five-Year Development Plan, artificial intelligence (AI) was included among the country's key industries. In an effort to address AI's technological challenges, six (06) ministerial sectors, led by the Ministry of Science and Technology, issued policies in 2022 that included "Guidelines for Accelerating Innovation in Scenes to Promote High-Level AI Application and Achieve High-Quality Economic Develop-

ment." The same ministry also issued a "Notice on Supporting the Construction of New-Generation AI Application Scenes." These policies focused on planning, stimulating, and building to support and promote the application and development of AI technologies in many areas, most notably smart health, smart transportation, smart cities, and smart manufacturing. This has contributed to increasing the effectiveness of the intelligent transformation of the economy and society in the People's Republic of China. The establishment of the "National Committee for the Management of New-Generation Artificial Intelligence" In 2019, the publication of "Next Generation AI Governance Principles – Responsible AI Development" was a powerful factor in laying a solid foundation for safe, controllable, and reliable AI development in the future (Trends Research & Advisory 2025).

According to a report issued by the McKinsey Global Institute, AI could contribute to enhancing productivity in the Chinese economy, adding between 0.8 and 1.4 percentage points to GDP growth annually, depending on the speed of adoption of AI systems in the economy (McKinsey Global Institute 2017, 9).

3.2. DeepSeek- A Model of Chinese AI Startups:

In the field of artificial intelligence, it has been widely believed that producing large, advanced language models requires significant financial and technical resources. This is one of the reasons why the US government pledged to support the STAR GATE project, announced by US President Donald Trump, with a budget estimated at \$500 billion (Sean Mecheal 2025).

However, on January 20, 2025, the Chinese AI startup DeepSeek challenged this notion by releasing AI models at a low cost compared to the enormous costs incurred by other

companies to develop their own AI models (Sean Mecheal 2025).

DeepSeek is an AI startup based in Hangzhou, China, founded in May 2023 by Liang Wenfeng, a graduate of Zhejiang University. Wenfeng is also a founder of High-Flyer, a Chinese quantitative hedge fund (Sean Mecheal 2025).

DeepSeek focuses on developing open-source AI software. The first model was released in November 2023, but it did not gain global recognition until the release of its DeepSeek R1 logic model in January 2025 (Sean Mecheal 2025).

What distinguishes DeepSeek is that the monthly cost per user is \$0.50, a small amount compared to the O1 model of ChatGPT. DeepSeek attributes this low cost to the fact that the cost of developing and operating the model is significantly lower than that of competitors. The cost of developing the model and its servers was estimated at only \$5.5 million, while companies such as Open AI, Meta, and Google required millions of dollars to develop their models (Ahmed Hassan 2025). Given that China's DeepSeek has become the most competitive organization with the American OpenAI, it is important to make a comparison between the two by focusing on the approach adopted by each organization:

Figure 01: The approach adopted by China's DeepSeek and the American OpenAI

	OpenAI	DeepSeek
Founding year	2015	2023
Headquarters	San Francisco, Calif.	Hangzhou, China
Development focus	Broad AI capabilities	Efficient, open source models
Key models	GPT-4o, o1	DeepSeek-V3, DeepSeek-R1
Specialized models	Dall-E (image generation), Whisper (speech recognition)	DeepSeek Coder (coding), Janus Pro (vision model)
API pricing (per million tokens)	o1: \$15 (input), \$60 (output)	DeepSeek-R1: \$0.55 (input), \$2.19 (output)
Open source policy	Limited	Mostly open source
Training approach	Supervised and instruction- fine-tuning	Reinforcement Learning
Development cost	Hundreds of millions of dollars for o1 (estimated)	Less than \$6 million for DeepSeek-R1, according to the company

Source: Sean Mechael Karner, DeepSeek Explained: Everything you need to know, <https://www.techtarget.com/whatis/feature/DeepSeek-explained-Everything-you-need-to-know>

➤ **The major models released by DeepSeek:**

Since its founding in 2023, DeepSeek has released a series of generative AI models. The most important of these models can be identified as follows (Sean Mecheal 2025):

1. **DeepSeek Coder:** released in November 2023, this is the company's first open source model designed specifically for coding-related tasks.
2. **DeepSeek LLM:** released in December 2023, this is the first version of the company's general-purpose model.
3. **DeepSeek-V2:** released in May 2024, this is the second version of the company's LLM, focusing on strong performance and lower training costs.
4. **DeepSeek-Coder-V2:** released in July 2024, this is a 236 billion-parameter model offering a context window of 128,000 tokens, designed for complex coding challenges.
5. **DeepSeek-V3:** released in December 2024, DeepSeek-V3 uses a mixture-of-experts architecture, capable of handling a range of tasks. The model has 671 billion parameters with a context length of 128,000.
6. **DeepSeek-R1:** released in January 2025, this model is based on DeepSeek-V3 and is focused on advanced reasoning tasks directly competing with OpenAI's o1 model in performance, while maintaining a significantly lower cost structure. Like DeepSeek-V3, the model has 671 billion parameters with a context length of 128,000.
7. **DeepSeek-R1-0528:** released in May 2025, the R1-0528 model is an updated version of the original R1 model. The model now supports system prompts, JSON output and function calling, making it more suitable for agent AI use cases. DeepSeek also claims it's more accurate with reduced hallucination rates compared to the prior release. R1-0528 also benefits from great reasoning

depth, averaging 23,000 tokens per question vs. 12,000 in the previous version.

8. **DeepSeek-R1-0528-Qwen3-8B:** a smaller, distilled version based on Alibaba's Qwen3 model that is intended for systems with limited computational resources. According to DeepSeek, this 8 billion parameter model matches the performance of the larger Qwen3-235B model.
9. **Janus-Pro-7B:** Released in January 2025, Janus-Pro-7B is a vision model that can understand and generate images.

In addition to the above, there are several AI startups in China that are seeking to build and develop their capabilities in this field with the aim of improving the quality of their services and thus enhancing their competitiveness. These include:

3.2.1 StepFun (Middle East 2025):

Founded in April 2023 by former Microsoft Senior Vice President Jiang Daxin, StepFun was a relatively latecomer to the AI startup scene, but it quickly became a competitor thanks to its portfolio of core models. It is also committed to building artificial general intelligence (AGI), a mission that many Chinese startups have abandoned.

Thanks to support from investors such as Tencent and funding from the Shanghai government, StepFun has released 11 basic AGI models by 2024, including language, visual systems, video, audio, and multimedia systems.

Step-2 is currently StepFun's largest language model, containing over a trillion parameters (GPT-4 contains approximately 1.8 trillion). Step-2 currently ranks after...

ChatGPT models GPT, DeepSec, Cloud, and Gemini are ranked highly on LiveBench, a benchmarking site that evaluates the capabilities of large language models.

Step-1V, a multimodal model, also ranks highly for its ability to understand visual inputs on Chatbot Arena, a crowdsourcing platform where users can compare and rank the performance of AI models.

The startup is currently working with AI developers who oversee the construction of its models. According to data from Chinese media outlet KR36, demand from external developers using Stepfun's multimedia API increased more than 45-fold in the second half of 2024.

3.2.2. ModelBest (Middle East 2025):

Founded by researchers from Tsinghua University in 2022 in the Haidian District of Beijing, the company has been characterized by its focus on efficiency and its adoption of small language models.

Its MiniCPM series—often called "Little Powerhouses" in Chinese—is designed for real-time on-device processing on smartphones, personal computers, automotive systems, smart home devices, and even robots. Its customer perspective is that this combination of smaller models and local data processing reduces costs and enhances privacy.

ModelBest's latest model, MiniCPM 3.0, has only 4 billion parameters, but it matches the performance of GPT-3.5 in many ways from the standards.

3.2.3. Zhipu AI Foundation (Middle East 2025):

Zhipu AI was also founded at Tsinghua University and has grown rapidly into an organization with strong ties to government and academia. Zhipu AI is developing core models as well as AI products based on them, including ChatGLM, a conversational model, and a video generator called Ying, similar to OpenAI's Sora.

GLM-4 Plus, the company's most advanced large language model to date, is trained on high-quality synthetic data, reducing training costs and, in turn, rivaling the performance of GPT-4. Zhipu AI has further advanced its models, releasing GLM-4V Plus, a vision model capable of interpreting web pages and videos, marking a step toward more agent-like AI capabilities.

3.2.4. Infinigence AI (Middle East 2025):

Founded in 2023, Infinigence AI is younger than the aforementioned companies and focuses on infrastructure rather than model development. Its main selling point is its ability to successfully combine chips from multiple brands to perform AI tasks, forming what it calls a "heterogeneous computing cluster." This is a unique challenge facing Chinese AI companies due to US chip sanctions.

Infinigence AI claims its system can increase the efficiency of AI training by simplifying how different chip architectures – including models from AMD, Huawei, and Nvidia – work in sync.

Furthermore, Infinigence AI has launched the Infini-AI cloud platform, which combines products from multiple vendors for model development and deployment. The organization aims to build an efficient, native, and “Chinese-specific” computing solution for AI training. It claims its HetHub training system can reduce the time required to train AI models by 30% by optimizing the heterogeneous computing clusters that Chinese enterprises often have.

Therefore, based on the above, it can be said that thanks to the sound planning adopted by the Chinese government in dealing with current and future challenges, particularly technological ones, it has enabled it to keep pace with contemporary developments that have come to characterize developed coun-

tries, particularly the United States. Its interest in supporting emerging companies of a vital and strategic nature has enabled it to compete with major institutions in critical technological fields, most notably artificial intelligence. Therefore, the DeepSeek Foundation is considered a model of successful experiences in competing to provide the best services to customers in the field of artificial intelligence at the lowest costs.

Conclusion:

By examining and analyzing the three parts previously presented in this study, it can be concluded that the most important startups in the People's Republic of China are technological in nature, focusing on biotechnology industries, most notably electronic chips, and also on producing advanced models of artificial intelligence. This is due to the Chinese government's approach to supporting startups. In this regard, it has focused on supporting and enhancing the capabilities of biotechnology-based companies, with the aim of responding to current and future development challenges, thereby enhancing economic and social development and the ability to compete in international markets in areas that are witnessing increasing demand, most notably biotechnology industries and advanced models of artificial intelligence.

Based on the above, this work's findings are:

Results:

- Startups constitute an integral part of the Chinese economic sector.
- Startups in the People's Republic of China receive political, technical, and financial support to enable them to

achieve their goals, develop their businesses, and achieve the overall objectives of Chinese economic policies.

- The Chinese government focuses on supporting startups specializing in biotechnology production, such as microchips, and in the development of advanced artificial intelligence models.
- The "Little Giant" program is one of the most important recent outcomes of the People's Republic of China's general economic policies. It is classified as a strategy that includes three dimensions:
 - ✓ Achieving independence from American dependence in the biotechnology industry, particularly microchips.
 - ✓ Achieving self-sufficiency in the biotechnology industry.
 - ✓ The ability to compete with leading institutions in this field and expand their influence in global markets.
- The Chinese company DeepSeek is an example of a successful startup in the field of developing artificial intelligence models, which has enabled it to compete with leading American institutions in this field and helped it expand its influence in global markets.

Recommendations:

There are a set of recommendations based on the fact of emerging companies in the People's Republic of China. Through these recommendations, the objective is to provide some additional inputs that could contribute to the development of policies related to supporting the emerging companies sector in Algeria:

- Providing political, regulatory, technical, and financial support to investors and entrepreneurs to encourage them to adopt emerging companies in the field of biotechnology production, which is in high demand in local, regional, and international markets. This aims to achieve self-sufficiency and independence from dependence on major industrialized countries.
- Concluding partnership and cooperation agreements between emerging companies in Algeria and Chinese emerging companies, particularly those leading in the fields of biotechnology and artificial intelligence, with the aim of gaining the necessary expertise. This is achieved through :
 - ✓ Organizing scholarships in the field of science and technology for Algerian professors and students at leading Chinese universities in this field, with the aim of enabling them to acquire the knowledge, skills, and behaviors that will help manage emerging companies in Algeria.
 - ✓ Organizing training programs for startup owners in Algeria and their employees, including administrators, engineers, and technicians, to enable them to acquire the ability to respond to current and future challenges. These programs should be permanent and ongoing, not temporary.
 - ✓ Organizing international forums between Algeria and the People's Republic of China to assess the status of startups in biotechnology and artificial intelligence in both countries and to explore solutions that help improve the performance of these institutions.

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Shadow Areas: Challenges and Solutions

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Abstract:

The concept of "shadow areas," which refers to the phenomenon of poverty, marginalization, absence of social justice, and the disruption of development in some areas of the country (due to isolation and other factors), dominated the official political scene and government action in the field of local development for a period of nearly three years (2020–2022).

Keywords: shadow areas, poverty, isolation, remote areas.

Zones d'ombre : défis et solutions

Résumé :

Le concept de « zones d'ombre », qui désigne le phénomène de pauvreté, de marginalisation, d'absence de justice sociale et de perturbation du développement dans certaines régions du pays (en raison de l'isolement et d'autres facteurs), a dominé la scène politique officielle et l'action gouvernementale dans le domaine du développement local pendant près de trois ans (2020-2022).

Mots clés : zones d'ombre, pauvreté, isolement, régions éloignées.

Introduction

The term “shadow areas” received increasing attention from the President of the Republic, Mr. Abdelmadjid Tebboune, members of the government, and researchers at the national level after he assumed the presidency of the Republic, due to the difficult and miserable conditions experienced by the residents of shadow areas because of the lack of vital infrastructure in these regions and the absence of facilities and state services, despite the existence of some limited development programs within remote border municipalities and municipalities close to urban cities.

On this basis, the President of the Republic paid special attention to shadow areas by launching an urgent program specifically for them. All institutions were mobilized to serve this file, and officials were appointed at the district and municipal levels to supervise the shadow areas. Financial allocations were dedicated to implementing urgent projects to break the isolation of the population in remote, mountainous, and isolated areas, and efforts were made to ensure the widespread connection of these regions to electricity, gas, and water networks, as well as to provide health and education services, etc.

This study carries particular importance because the issue of shadow areas is considered one of the major challenges for the Algerian legislator since independence until today, due to the challenges and problems these areas face, especially in developmental fields.

The main objective of this topic is to focus on clarifying the general concept of shadow areas by providing an academic definition of what is meant by them, as a fundamental step toward achieving the second objective: highlighting the main problems hindering the measures taken for their development, along

with presenting a set of proposed solutions to address and minimize them.

From the above, we pose the following central question: What is meant by shadow areas?

To achieve the objective of the study and answer the proposed question, we adopted the descriptive method, which defines the general framework of the study through the following steps:

- Chapter One: The Concept of Shadow Areas
- Chapter Two: The Problems and Deficiencies Suffered by Shadow Areas and How to Address Them

1. The Concept of Shadow Areas

As mentioned earlier, the term “shadow” was not widely used in the past. It appeared prominently during a government council meeting in 2020, and thereafter it became a political, social, and economic term, widely used to describe focal points of underdevelopment across the country, referring to isolated areas deprived of development.

1.1. Definition of Shadow Areas

Shadow areas are defined as:

“Those isolated areas that lack the minimum conditions of life, such as the absence of electricity, gas, water networks, sanitation, public lighting, while lacking sports and health facilities, in addition to the remoteness of schools and health centers, leaving them in poverty and unemployment.”

They also refer to:

“Remote areas, also called poor regions, still covered by the shadow that has not lifted because they have been deprived of their right to local

development. This has created geographical zones with a significant population density that lack the necessary facilities and daily life requirements, producing harsh consequences for the inhabitants of these human spaces, making it truly necessary to place them under real care to remedy the delay they have suffered.”

In Algeria, this term was employed politically and in the media to draw attention to deprived regions (or focal points of underdevelopment). In a preliminary census (June 2020), their number was estimated at 15,044 shadow areas, i.e., an average of 10 per municipality (dividing 15,000 by the 1,541 municipalities), inhabited by about 8 million Algerians. According to Mr. Ibrahim Mourad, advisor to President Tebboune on shadow areas, their needs included: “opening paths leading to villages and hamlets, connecting to electricity and gas, ensuring health coverage which is sometimes almost non-existent, providing drinking water and sewage networks, improving schooling and school transport, and creating leisure facilities.”

Later, this figure was revised downward to 13,587 shadow areas (instead of 15,040 in the initial census), due to “scrutiny and review of classification criteria, including that areas with some deficiencies but close to cities are not considered shadow areas,” as declared by the President’s advisor on shadow areas.

1.2. Criteria Adopted in Classifying Shadow Areas

The census and classification of deprived areas as shadow areas considered the following criteria and guidelines:

- Verification and correction of proposed projects, both in number and subject, and ensuring objectivity by proposing only projects with real impact.
- Limiting the proposal of projects within the framework of urban improvement.

- Focusing on projects that have a direct and rapid impact on citizens' lives, especially in remote areas, and speeding up their registration while taking into account cost elements, short implementation periods, and positive and direct effects on those areas. Examples include:
 - Capturing water sources, preparing them, and putting them at the service of citizens (as public fountains), building small reservoirs with distribution networks, and supplying them by tankers.
 - Sanitation (installing sewage networks with a treatment station maintained periodically).
 - Using solar energy (for household use or public lighting).
 - Supplying these areas with propane gas tanks.
 - Opening paths, among other operations that serve these areas and can be implemented in the same manner mentioned above, with the necessity of involving the technical services of the district.

By applying these guidelines and criteria, the deficiencies and needs of deprived regions were identified, through which they can be classified as shadow areas.

1.3. The Goal of Developing Shadow Areas

The state seeks to upgrade these areas through integrated development projects with social and economic dimensions, implemented on participatory bases aiming to achieve four strategic objectives:

- Ending the isolation of populations living in scattered and remote areas.
- Supplying residents with drinking water, electricity, and gas.

- Improving students' schooling conditions and providing services related to youth health and development.
- Diversifying the economic capacities of remote areas to provide jobs and employment opportunities.

The development of shadow areas aims to restore the value of rural areas, enabling them to fulfill their social and economic role and contribute to national and local income through wealth-producing activities. The state hopes that the countryside will witness reverse migration after reaching the required level of development.

2. The Problems and Deficiencies Suffered by Shadow Areas and How to Address Them

The shadow areas are characterized by the difficulty of their geographical scope, whether mountainous, desert, or semi-desert, marginal areas on the national borders or the borders between the provinces within the national territory. These areas suffer from all manifestations of misery, marginalization, and oppression due to the absence of the most basic conditions of natural life.

As a model of shadow areas in Algeria, we find the Algerian countryside, which has been suffering from marginalization and poverty since the colonial era, which made the independent Algerian state since its inception give utmost importance to the countryside, which is known as rural development, which is currently similar to the development of shadow areas. To confront these shortcomings, the state has taken a set of measures to address all the deficiencies suffered by the shadow areas, which will be discussed later.

2.1. Problems and deficiencies suffered by shadow areas

Most statistics indicate that more than 08 million Algerians out of a total population estimated at 45 million live in difficult liv-

ing conditions in poor areas in the countryside, border areas, and the outskirts of major cities. In this part of the study, we will try to identify the problems suffered by the residents of these areas.

2.1.1. Weak services in shadow areas:

The Algerian state failed in past eras to establish a regular and fair pattern of distribution of investments throughout the country, which resulted in the existence of many areas suffering from economic and social marginalization. This is evident when looking at indicators related to the level of services, facilities, health, and education, among others, where we find areas lacking necessary facilities in the field of health and experiencing weak educational opportunities, especially regarding university education. They also lack recreational spaces, electricity and gas networks, and road development, with many municipalities in complete isolation.

2.1.2. Low standard of living:

Shadow areas suffer from all the manifestations of misery that remote areas live in, as they suffer from fragility and their residents experience difficult and miserable living conditions due to the lack of vital infrastructure and the most basic necessities of life, and their citizens suffer from exclusion and marginalization.

2.1.3. Weak local resources:

Most shadow areas in Algeria suffer from weak collection of their local resources, as many municipalities located on the borders, for example, do not cover their local revenues to meet the needs of their local residents. The reasons for the weakness of local resources in shadow areas, especially the border ones,

are due to the weakness of the agricultural, industrial, and tourism structures.

2.1.4. High unemployment rate and increased migration rates:

The high unemployment rate in shadow areas has led to increased migration rates from these areas, depriving them of their high human potential and creating random communities within the major cities. Algeria has witnessed a wide spread of chaotic construction within major cities in recent years.

2.2. Measures taken regarding the problems suffered by shadow areas

To address the shortcomings of shadow areas, we note that there are a set of measures taken by the authorities, which are:

2.2.1. Promoting local development:

In order to promote local development, attention must be paid to the local economic aspect in order to provide revenues for the municipality through encouraging local investment, as the latter is the main driver of all economic activities.

2.2.2. Formation of provincial committees:

Provincial committees are formed at the level of the province and an urgent program is put in place to ensure the optimal care of the basic needs of the residents of these areas, in coordination with the joint ministerial committee formed to supervise the implementation of the shadow areas identification process and the implementation of its special urgent program. The provincial committee also creates committees at the district level to handle the implementation of operations related to shadow areas.

2.2.3. *Recording all deficiencies:*

All the deficiencies suffered by the shadow areas and the registered needs in terms of basic services such as city gas and electricity, road networks, sewage channels, school meals, and transportation in these areas are recorded, along with providing the financial evaluation and preparing the detailed technical cards for each registered operation.

Conclusion:

The concept of shadow areas has topped the highest levels of the state through presidential and governmental discourse, so that speeches are delivered about it, seminars are held about it, policies are set for it, significant financial envelopes are allocated to it, and various media are mobilized to cover events related to it, to the extent that an ordinary observer might think that the matter relates to a newly emerging or newly discovered phenomenon, and that solving it enjoys the highest degrees of importance for the highest public authorities within the framework of what is known as building the “new Algeria,” which gives it a special character that distinguishes it from other developmental phenomena, while at the same time raising a questioning inquiry about the justifications, origins, and backgrounds of this attention and the use of political discourse for mobilization around it.

It can be said that the urgent program for the development of shadow areas represents an overcoming of the failures of local development policy in Algeria, given the failure of the various policies compared to the level of attention and expenditure allocated by the center to this type of public policy, and at

the same time, it is a strategy to achieve comprehensive and balanced national development.

Through our discussion of the concept of shadow areas, we reached the following results and recommendations:

Results:

- Local development programs in their three forms (PCD; PSD; FCCT+) contribute to achieving a set of necessary projects in the shadow areas of the Hammadiyah municipality, which guarantee the minimum standard of living for the citizen and meet his living necessities of drinking, education, transportation, lighting, sanitation, electricity, and gas.
- The reality of development in Algeria confirms the existence of general problems and economic and social imbalances in shadow areas.
- We note that despite the existence of these programs, projects, and bodies for a considerable period of time, local development has not been achieved, and the best evidence of this is the increasing statistics of shadow areas.

Recommendations:

- Directing development towards productive sectors such as encouraging agriculture, livestock breeding, and traditional industries.
- Seeking the help of local or foreign experts for proper planning.
- Activating the participation of civil society in local development through project proposals and monitoring.
- Working to create a suitable environment for investment and expand its scope by increasing the number of economic projects.

- Working on properly implementing development projects by activating the role of oversight while respecting the specified time for their completion.

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