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Cognitive difficulties in comprehending structural concepts among linguistics students
A cognitive approach in light of cognitive linguistics

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Abstract
This study examines the cognitive difficulties faced by linguistics students in understanding structural concepts from a cognitive linguistics perspective. It argues that these difficulties stem not only from the complexity of structural linguistics itself, but also from the limitations of students' cognitive processing, particularly in dealing with abstract concepts and constructing mental representations of linguistic structures.
The study highlights the epistemological shift from traditional linguistic thought to modern structural linguistics as a major source of difficulty. This transition requires students to reconstruct their conceptual framework, moving from normative and philosophical approaches to a descriptive and scientific understanding of language as an autonomous system.
The study places particular emphasis on the cognitive complexity of Saussurean dichotomies (such as langue/parole, signifier/signified, and system/form), which

require a high level of abstraction and place a heavy burden on working memory. The concept of the arbitrariness of the linguistic sign also creates cognitive dissonance, as it contradicts learners' intuitive assumptions about language.
The study also addresses the issue of cognitive overload resulting from the need to simultaneously process multiple linguistic levels (phonological, morphological, syntactic, and semantic) and understand their interrelationships. Additional challenges include distinguishing between closely related fields such as phonetics and phonology, as well as confusion caused by terminological proliferation, especially in multilingual academic contexts.
Furthermore, the hierarchical nature of linguistic knowledge, the overlap between interdisciplinary branches (such as sociolinguistics and psycholinguistics), and the gap between theoretical knowledge and practical application further complicate students' understanding. The study emphasizes that students often find it difficult to transition from analysis to synthesis and productive language use.
The study concludes that these cognitive challenges require pedagogical reconsideration. It recommends adapting the teaching of structural linguistics to align with learners' cognitive capacities by reducing cognitive load, clarifying terminology, linking abstract concepts to concrete examples, and strengthening the connection between linguistic structure and communicative function.

Keywords *: Cognitive linguistics, structural linguistics, cognitive difficulties, Saussurean dichotomies, arbitrariness of the linguistic sign, cognitive overload, mental representation, terminology, linguistic pedagogy*

Résumé
Cette étude examine les difficultés cognitives rencontrées par les étudiants en linguistique dans la compréhension des concepts structurels, dans une perspective de linguistique cognitive. Elle soutient que ces difficultés découlent non seulement de la complexité de la linguistique structurelle elle-même, mais aussi des limites du traitement cognitif des étudiants, notamment lorsqu'il s'agit d'aborder des concepts abstraits et de construire des représentations mentales des structures linguistiques.
L'étude met en évidence le changement épistémologique opéré entre la pensée linguistique traditionnelle et la linguistique structurelle moderne comme une source majeure de difficulté. Cette transition exige des étudiants qu'ils reconstruisent leur cadre conceptuel, passant d'approches normatives et philosophiques à une compréhension descriptive et scientifique du langage en tant que système autonome.

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L'étude met particulièrement l'accent sur la complexité cognitive des dichotomies saussuriennes (telles que langue/parole, signifiant/signifié et système/forme), qui exigent un haut niveau d'abstraction et imposent une lourde charge à la mémoire de travail. Le concept d'arbitraire du signe linguistique crée également une dissonance cognitive, car il contredit les hypothèses intuitives des apprenants sur le langage.

L'étude aborde également la question de la surcharge cognitive résultant de la nécessité de traiter simultanément plusieurs niveaux linguistiques (phonologique, morphologique, syntaxique et sémantique), et le fossé entre les connaissances théoriques et leur application pratique complique encore davantage la compréhension des étudiants. L'étude souligne que les étudiants ont souvent du mal à passer de l'analyse à la synthèse et à l'utilisation productive de la langue. L'étude conclut que ces défis cognitifs nécessitent une refonte pédagogique. Elle recommande d'adapter l'enseignement de la linguistique structurale aux capacités cognitives des apprenants en réduisant la charge cognitive, en clarifiant la terminologie, en reliant les concepts abstraits à des exemples concrets et en renforçant le lien entre la structure linguistique et la fonction communicative.

Mots-clés *: Linguistique cognitive, linguistique structurale, difficultés cognitives, dichotomies saussuriennes, arbitraire du signe linguistique, surcharge cognitive, représentation mentale, terminologie, pédagogie linguistique*

Introduction

Structural linguistic discourse constitutes a fundamental pillar in the academic training of linguistics students, serving as the scientific gateway to understanding language as a system of organized internal relations. Yet many students encounter and manifest difficulties in comprehending this discourse — difficulties that transcend the mere complexity of the subject matter and extend to limited cognitive capacities for processing abstract concepts and constructing mental representations of structural relationships.

Linguistics[1] is a discipline both ancient and new; it was not born fully formed from the minds of scholars, but has been developed and continues to develop. Georges Mounin clarified this idea when he stated: "It would be an error to believe that linguistics suddenly exploded like a thunderclap in a calm sky; for at least two and a half thousand years, people have been continuously reflecting on their language. The history of this science allows us to see more clearly what constitutes the specificity of current theories. It was the Hindus, then the Greeks, then the Arabs who first laid the foundations of a remarkable phonetic analysis, which was neglected for two thousand years."[2]

This historical accumulation of linguistic knowledge — from the Hindus to the Greeks and then the Arabs, constitutes in itself a cognitive burden upon the contemporary student, who is required to simultaneously assimilate the evolution of

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linguistic thought across the ages and understand the specificities of current theories.

1. Cognitive Difficulties in Understanding the Epistemological Transformation of Linguistics

1.1. The Cognitive Complexity of the Methodological Rupture

A survey of the human civilizational development trajectory reveals a consciously cultivated linguistic heritage in the advanced epochs of history, rich with linguistic studies. Language has claimed the lion's share of attention across civilizations, varying in place, time, and thought. Evidence of this interest lies in peoples' concern with recording and preserving language, for different purposes — whether religious, philosophical, or mythological.[3] Linguistic thought is cumulative: ancient practices have contributed substantially to the advancement of modern linguistic studies.

Arabic linguistic efforts encompassed all levels and domains of language, beginning with the phonological level, then the morphological, syntactic, and finally the semantic level.[4] Arabic linguistic research emerged under the aegis of the Holy Qur'an and its sciences (recitation, exegesis), jurisprudence, rhetoric, grammar, and theology. The phonological level received the attention of Qur'anic readers, grammarians, and legal theorists alike, and the major classical works contain valuable phonetic contributions, such as the Mu'jam al-'Ayn of al-Farahidi and Sirr Sina'at al-I'rab of Ibn Jinni.

From the perspective of cognitive linguistics, the student here faces what is known as "Conceptual Recategorization", whereby they must abandon entrenched notions about the nature of linguistic study and construct an entirely new conceptual framework.

1.2. The Transition from Philosophy to Science

Modern linguistics emerged at the beginning of the twentieth century at the hands of the Swiss scholar Ferdinand de Saussure,[4] who laid the theoretical foundations of this discipline in his work «Course in General Linguistics». Prior to de Saussure, language fell within the domain of philosophy, philology, or comparative grammar; but the advent of linguistics effected a rupture with these approaches through:

1) The adoption of the descriptive scientific method as an alternative to the normative, historical, or comparative methods.
2) A focus on language in and for itself (linguistic study proceeds from language and ends at language).
3) The distinction between the concepts of langue and parole, that is, between the social linguistic system and its individual use.[5]

At the outset of his work, de Saussure holds that every science has a fundamental task that must be defined and identified in itself; he saw that linguistics was in danger of being absorbed by other sciences — particularly philosophy and psychology. It was therefore imperative that this discipline defines its own subject matter and methods.[9]

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From the perspective of cognitive linguistics, this transition requires the student to:

- Reconstruct the conceptual framework: partially relinquish the focus on normativity and open up to descriptivity.
- Broaden the scope of interest: from language as a communicative tool to language as an autonomous system.
- Understand scientific autonomy: recognize that linguistics is a self-contained discipline with its own subject matter and methods.

2. The Cognitive Complexity of De Saussure Dichotomies

2.1. The Conceptual Structure of the Dichotomies

In his Course in General Linguistics, Ferdinand de Saussure set forth a series of dichotomies upon which he built his linguistic thought and which also constitute the foundation of his structural methodology. These dichotomies contributed to constructing a new conception of the linguistic phenomenon as a system of internal relations rather than merely a collection of vocabulary and rules.

What distinguishes De Saussure is the idea of opposing dichotomies (which may stem from his indebtedness to the classical theory holding that everything in the universe has two different yet complementary facets). He focused on studying speech rather than written language, analyzed the internal system of language rather than lexical and grammatical comparisons, and situated language within its social context rather than viewing it as a collection of physical features.

The human brain tends toward simplification, yet the De Saussure dichotomies require maintaining subtle distinctions in working memory — a demand that strains the student's limited cognitive resources.

2.2. The Dichotomy of System and Form (Système/Forme)

2.2.1. The Concept of System

For De Saussure, the system is the overarching structure within which linguistic elements (sounds, words, structures) are organized according to defined relations. He holds that language is not a collection of independent words but a system of relations, such that no linguistic element acquires its value except through its position within the system.

From the perspective of cognitive linguistics, understanding that "elements acquire their value only through their position in the system" requires:

- Relational thinking: recognizing that meaning is not intrinsic but relational.
- Understanding the whole before the part: grasping the overarching system before understanding individual elements.
- Cognitive abstraction: constructing a mental representation of an invisible network of relations.

2.2.2. The Concept of Form

For De Saussure, form is the external structure or acoustic image of the linguistic sign. Language, in his view, is composed of signs, and every sign (signe) — a linguistic unit = the word as sound and meaning, is divided into:

- The signifier (le signifiant): the acoustic/auditory image; the phonetic or material form of the word.

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- The signified (le signifié): the conceptual/mental image; the idea or meaning to which the word refers in the mind.
- Signification: the coupling of the acoustic and mental images.[6]

De Saussure states in this regard: "The linguistic sign unites, not a thing and a name, but a concept and a sound-image. The latter is not the actual sound, a purely physical thing, but the psychological imprint of the sound."

The cognitive difficulty here is twofold: the student must understand that "form belongs to the external expression of language, while system belongs to its internal structure", while simultaneously grasping that both are necessary for understanding language. This distinction between external appearance and internal structure requires the capacity to think on two levels of abstraction simultaneously.

2.3. The Dichotomy of Langue and Parole

To explain this dichotomy, we refer to a set of terms presented by De Saussure:

- 'Langage' (community and individual): a human phenomenon with multiple forms produced by the language faculty.
- 'Langue' (general shared linguistic system): a social, conventional, acquired system constituting an agreed-upon code within a specific human community.
- Parole (speech, the act of speaking): an individual concept belonging to 'langue'; it encompasses the

individual features that characterize a person's execution of the 'langue'.[7]

From the perspective of cognitive linguistics, distinguishing between 'langue' as an abstract system and parole as an individual practice requires a difficult process of cognitive abstraction, particularly since the student is accustomed to treating language as an integrated whole. The student's working memory must retain these complex tripartite distinctions while understanding the interactive relations between them — a task that in many instances exceeds the limited capacity of working memory.

2.4. Cognitive Dissonance in Understanding Arbitrariness

The concept of the "arbitrariness of the linguistic sign" conflicts with the learner's natural intuition, which tends to assume the existence of a natural relationship between signifier and signified, thereby creating Cognitive Dissonance.

When De Saussure states that the linguistic sign unites not are a thing and a name but a concept and a sound-image, he is asking the student to understand three levels:

- The physical level: the material sound.
- The psychological level: the psychological imprint of the sound (the signifier).
- The conceptual level: the mental concept (the signified).

The relationship between the second and third levels is arbitrary — that is, there is no natural motivation linking the acoustic image to the concept. This concept requires the

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student to abandon their natural intuition, a psychologically costly cognitive operation.

3. Working Memory Overload in Linguistic Levels

3.1. The Necessary Interpenetration of Levels

The analysis of any linguistic phenomenon necessitates the interaction and complementarity of the syntactic, semantic, and pragmatic levels on one hand, and the morphological and phonological levels on the other hand; for it is impossible to restrict analysis to one level in isolation from the others, since language operates as a system in which the linguistic levels interpenetrate.

This necessary interpenetration poses a considerable cognitive challenge for the student attempting to assimilate each level individually. From the perspective of cognitive linguistics, the student faces a "Multi-layered Cognitive Load", whereby they must:

- Understand each level independently.
- Perceive the relations between the levels.
- Apply this integrated understanding to actual linguistic phenomena.

3.2. The Cognitive Complexity of the Phonological Level

Modern linguistics branches into several specialized fields, the most important of which are the following:[8]

3.2.1. Phonetics

Phonetics studies speech sounds and their classifications from the following perspectives:[9]

- Articulatory Phonetics (Phonétique articulatoire): studies the organs of articulation (trachea, larynx, pharyngeal cavity, tongue, nasal cavity, lips), i.e., how sounds are produced, and their properties (voiced/voiceless, plosive/fricative/intermediate, velarized/open).
- Acoustic Phonetics (Phonétique acoustique): studies sound frequency, vibration, and the nature of the sound wave.
- Auditory Phonetics (Phonétique auditive): studies sound from its arrival at the ear through its perception at the brain level — "decoding speech".
- Experimental Phonetics (Phonétique expérimentale): studies sound in laboratory settings using instruments, devices, and X-ray imaging.

3.2.2. Phonology

Phonology is concerned with speech sounds that bear semantic relevance — those known as phonemes, along with their phonetic variants (allophones) in a given language, their properties, their systems, and the phonological rules governing them. While phonetics addresses the physical aspects of possible sounds in all languages, phonology addresses the phonological system of a specific language.

Phonology — whose founding is attributed to the Russian phonologist Nikolai Trubetzkoy, is specifically concerned with the study of the following phonological phenomena:

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— The phoneme: the minimal unit of this analysis and the foundation of phonological analysis.
— The syllable (syllabe).

3.2.3. The Cognitive Difficulty in Distinguishing the Two Fields

From a cognitive perspective, the distinction between Phonetics and Phonology is complex because it requires the student to:

- Understand the difference between the material and the functional: the material dimension versus the functional dimension of sound.
- Recognize that the same phonetic phenomenon can be studied from two different angles.
- Maintain this distinction when analyzing any phonetic phenomenon.

3.2.4. Confusing Terminological Proliferation

The abundance of translated and divergent terms (phoneme/sound unit phonetics/phonology phonetics/fonologia) creates conceptual confusion in the student's mental structure. The Arabic-speaking student faces a doubled challenge:

- Assimilating the concept itself.
- Dealing with the proliferation of Arabic terms for the same concept.
- Understanding the original foreign term and its relationship to the various translations.

This terminological proliferation burdens working memory and impedes the construction of a coherent conceptual network.

3.3. The Hierarchical Structure of Linguistic Levels

The assimilation of linguistic levels requires cumulative cognitive construction, whereby understanding a higher level depends on mastery of the lower level; any deficiency in this construction leads to a collapse of overall comprehension.

3.3.1. The Morphological Level

Morphology is the domain that addresses the grammatical structure of words and the systems of morphemes used to build words, along with the rules governing those morphemes.[10] Understanding this level requires prior understanding of the phonological level, since morphemes are composed of phonemes.

3.3.2. The Syntactic Level

Syntax addresses the structure of linguistic sentences and their patterns, the relations between words and their effects, and the rules governing those relations. Since morphology addresses the rules of word structure and syntax addresses the rules of sentence structure, the domain that brings together the concerns of both disciplines may be termed grammar.[11] Understanding syntax requires prior knowledge of the morphological structure of words — at this juncture, the student faces cognitive difficulty in understanding the relationship between the two levels and how they complement each other.

3.3.3. The Semantic Level

Semantics (a term coined by Bréal) is the domain concerned with analyzing and describing the literal meaning

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of linguistic expressions. Its concerns are not limited to lexical aspects of meaning alone but extend to grammatical aspects as well; nor are its investigations confined to word meanings alone but encompass sentence meanings.[26]

Prior to the 1980s, linguists tended to restrict their treatment to the lexical meanings of individual words without adequately addressing grammatical elements and sentence structures. The development of generative grammar had a notable effect in broadening the concept of structural lexical semantics to encompass topics related to sentence semantics. This expansion in the concept of semantics creates additional cognitive burden upon the student attempting to assimilate the boundaries of each level.

3.3.4. The Textual Level

This level pertains to the study of texts and the manner in which cohesion and coherence are achieved within them.

In the usage of the scholars of legal theory, al-Shafi'i defines the text (nass) thus: "That which the Book has conveyed with the utmost clarity, such that no other [source] beyond the Revelation is needed for it."[12] For him, the text is the expression from which a legal ruling is deduced from the Qur'an or the Sunna.

In the modern era, Taha Abd al-Rahman defines it thus: "a construction composed of a number of well-formed sentences bound together by a set of relations."[13] Accordingly, the text is a written verbal corpus governed by relations, varying in length according to the demands of the context.

In the Western tradition, Julia Kristeva defines it as: "a discourse currently traversing the face of science, ideology, and politics... and, as a discourse that is sometimes polylingual and often polyphonic through the multiplicity of utterance modes that articulate it."[14]

The multiplicity of these definitions and their radical divergence confound the student and render the construction of a clear conception of the textual level a cognitively demanding undertaking.

3.4. The Additional Complexity of Interdisciplinary Branches

Linguistics has evolved to connect with several other disciplines (sociology, psychology...), giving rise through these connections to new branches concerned with specific issues:[15]

3.4.1. Sociolinguistics

Lyons defines this discipline as the study of language in relation to society. It is a branch that emerged from collaboration between linguistics and sociology, investigating the social meaning of the language system and its use, as well as the set of conditions shared between linguistic and social structure.[33]

3.4.2. Ethnolinguistics (Cultural Linguistics)

Lyons defines it as the study of language in relation to culture. Since culture presupposes a society, and society is subject to culture, the concerns of sociolinguistics and ethnolinguistics in their broad sense overlap to a considerable

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degree. This very overlap constitutes a cognitive difficulty: when does one study language socially, and when culturally?

3.4.3. Psycholinguistics

The term is composed of the Greek word psyche, meaning mind or intellect, and the Latin word lingua, meaning language; it is technically defined as the study of language and the mind.[35]

Among the topics studied by this discipline are language acquisition, language production, and language comprehension. Psycholinguists seek to identify the nature of the personal components of human linguistic competence and to discover the ways in which linguistic knowledge is linked to the actual use of language. Among the issues investigated by psycholinguistics that pose a challenge to its practitioners is the precise determination of the hereditary aspects of language.

The cognitive paradox here is that the student attempting to understand linguistics needs to understand psycholinguistics — that is, to understand how they understand! This creates a form of Meta-cognitive Thinking that doubles the cognitive load.

3.4.4. Stylistics

Stylistics is a branch of applied linguistics that studies stylistic variation in languages and the ways in which users exploit this variation. It is frequently used in a narrower sense, restricted to the study of the language of literary texts. The oscillation between the broad and narrow senses of the term creates conceptual ambiguity that burdens working memory.

4. The Gap Between Structural Theory and Application

4.1. The Absence of Conceptual Embodiment

From the perspective of cognitive linguistics, the student suffers from the fact that structural concepts remain abstract without being linked to sensory or concrete linguistic experiences from their lived reality.

When the student studies linguistics: "the scientific study of language as distinct from the individual efforts, impressions, and observations made by those interested in language throughout the ages", they find it difficult to connect this abstract definition to their daily linguistic practice.

Similarly, when studying the history of Arabic linguistic thought, the student encounters difficulty in connecting this historical heritage to contemporary linguistic practices. The discussion of the fact that Arabic linguistic efforts encompassed all levels of language, and that the major classical works contained valuable phonetic contributions such as al-Farahidi's Mu'jam al-'Ayn and Ibn Jinni's Sirr Sina'at al-I'rab, remains abstract historical knowledge unless linked to concrete applications.

4.2. The Weak Link Between Structure and Function

Human language is distinguished by a set of properties that set it apart from other systems of communication. These properties are: linearity, creativity, language transfer, linguistic shift, double articulation, and linguistic economy.

4.2.1. The Property of Linearity

Linearity (**La linéarité du signe**): the linguistic sign has a successive character; it unfolds in a temporal sequence, possessing a single dimension along which it moves during its production — a horizontal line termed the "speech chain"

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(i.e., it is transmitted and received successively along the temporal axis, such that no two linguistic units can occupy the same position in the speech chain).

This concept is frequently presented as an abstract structural fact without linking it to its communicative function: why does language exhibit linearity? How does this property affect our comprehension and production of speech? The absence of this functional connection renders the concept difficult to assimilate.

4.2.2. The Property of Double Articulation

Double Articulation (**La double articulation**): a term introduced by André Martinet in his functional theory. This concept is frequently referenced without adequate explanation of its economical function in language, rendering it an abstract structural concept whose importance the student finds difficult to perceive.

4.3. The Difficulty of Understanding the Relationship Between Linguistics and Communication Theory

Communication in language, on the pattern of interaction, carries the meaning of participation between two parties and signifies the exchange of signs between a sender and a receiver. Communication is the transfer of ideas, the exchange of cultures, and the conveying of desires to the other party through speech, writing, gestures, and various forms of expression.[16]

The term "**Communication**" is rendered in Arabic as either **tawāṣul** or **ittiṣāl**; although they share the same root and general meaning, they are not synonymous:

- Tawāṣul: a verbal noun derived from the augmented verb tawāṣala (**form** **التفاعل**), a form that denotes the shared participation of two or more parties in performing an act simultaneously. Tawāṣul is linked to verbal exchange and is premised on two principal activities: speaking and listening in oral communication, or reading and viewing in written communication.
- Ittiṣāl: a verbal noun derived from the augmented verb ittaṣala **(form** **الافتعال**), which does not convey the meaning of shared participation since the agent performing the action is only one party.

This abstract morphological distinction does not help the student understand the functional difference between the two concepts in actual use.

Research in communication theory was initiated in the United States in 1940, and its subject matter was defined following collaboration between mathematicians and communication engineers. It was defined as: "a reflective inquiry into the distinctive features of any sign system used between two entities for communicative purposes."

Its elements (the "elements of the speech circuit") are:

- The sender (émetteur)
- The receiver (récepteur)
- The channel (canal)
- The code (code): shared between speakers
- The message
- The communicative context (referent)

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Yet how do these elements intersect with the Saussurean dichotomies? How is the concept of "Langue" as a system positioned within this communicative model? This connection frequently remains unclear, creating a cognitive gap.

4.4. The Difficulty of Moving from Analysis to Synthesis

The ability to analyze the components of language does not necessarily imply the ability to reconstruct them, and this requires advanced cognitive skills in mental processing. Following intensive study, the student may be able to analyze a sentence into its levels:

- Phonological level: identifying phonemes and allophones.
- Morphological level: identifying morphemes.
- Syntactic level: identifying the grammatical structure.
- Semantic level: identifying meaning.

Yet the ability to reconstruct these elements to produce a new sentence, or to understand how these levels interact in the actual use of language, requires considerably higher cognitive skills. This gap between analysis and synthesis is among the greatest cognitive difficulties the student faces in assimilating structural discourse.

Conclusion

This cognitive approach has revealed the complex nature of the cognitive difficulties faced by linguistics students in assimilating structural concepts. The transition from

traditional linguistic studies to structural linguistics represents an epistemological rupture that demands a complete reconstruction of the student's conceptual framework.

The multiple cognitive difficulties converge — the conceptual complexity of the Saussurean dichotomies, the overloading of working memory in studying the interpenetrating linguistic levels, the **confounding terminological proliferation**, the rigid hierarchical structure of knowledge, and the gap between theory and application — to form a considerable cognitive barrier before the university student.

From the perspective of cognitive linguistics, understanding these difficulties is the first step toward developing effective pedagogical strategies that take into account:

- The limited cognitive capacities of the student's working memory.
- The necessity of conceptual embodiment for abstract concepts.
- The importance of linking structure to function.
- The need to address terminological proliferation.
- The development of skills for moving from analysis to synthesis.

The challenge lies not in simplifying the structural content or sacrificing theoretical depth, but in re-presenting it in a manner that respects the cognitive nature of the learner — transforming structural knowledge from abstract theoretical content into an effective cognitive tool for understanding language simultaneously as a system and as a practice.

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References

1. **Al-Tayib Dabba**. Principles of Structural Linguistics: An Analytical Epistemological Study, n.e., Algeria, 2001, pp. 43–44.
2. **Robert Martin**: Introduction to Linguistics, tr. Abd al-Qadir al-Muhayri, rev. Al-Tayib al-Bakkoush, Arab Organization for Translation, Beirut–Lebanon, 1st ed., September 2007, p. 65.
3. **Muhammad Muhammad Yunus Ali**: Introduction to Linguistics, Dar al-Kitab al-Jadid al-Muttahida, Beirut–Lebanon, 1st ed., June 2004, p. 99.
4. * Ferdinand de Saussure was born in Geneva on 26 November 1857. His early studies were in physics, then in language. His first book was The Phonetic System of the Ancient Indo-European Languages (1887). Four years later he became a member of the French Linguistic Society. Upon returning to Geneva, he held the chair of languages for several years, during which he delivered his celebrated lectures, published posthumously in 1916.
5. See: **Ferdinand de Saussure**, Course in General Linguistics, tr. Abd al-Qadir Qnini, Ifriqiya al-Sharq, Casablanca–Morocco, n.e., 1987, pp. 85–90.
6. See: Ferdinand de Saussure, Course in General Linguistics, tr. Abd al-Qadir Qnini, pp. 85–90.
7. See: Ibid., pp. 16–32.
8. See: **Husni Khalid**: Introduction to Contemporary Linguistics, Anfoprint Publications, Fes–Morocco, n.e., n.d., pp. 102–103.

9. **Muhammad Muhammad Ali Yunus**: Introduction to Linguistics, pp. 15–17.
10. **Ahmad Hassani**, Topics in Linguistics, Office of University Publications, Algeria, 1st ed., 1999, p. 22.
11. See: **Abd al-Rahman al-Hajj Salih:** Research and Studies in Arabic Linguistics, Mofem Publishing, Algeria, 2007, vol. 1–2.
12. **Muhammad ibn Idris al-Shafi'i**: Al-Risala, ed. Ahmad Muhammad Shakir, n.e., n.d., p. 32.
13. **Taha Abd al-Rahman**: On the Foundations of Dialogue and the Renewal of Kalam Science, Arab Cultural Center, Beirut–Casablanca, 2000, p. 35.
14. **Julia Kristeva**: The Text of the Novel, tr. Farid al-Zahi, Dar Toubkal, Morocco, 2nd ed., 1991, p. 14.
15. **Michel Zaccaria**, Applied Linguistic Issues: A Sociolinguistic and Psycholinguistic Study with a Heritage Approach, Dar al-'Ilm lil-Malayin, 1st ed., 1993, p. 70.
16. **André Martinet**, Principles of General Linguistics, pp. 15–19.