RESEARCH ARTICLE **Section:** *Language and Linguistics*

Reasoning in the tradition of Arabic grammar: History and manifestations

Musfir bin Mahmas Al-Dosari*
Prince Sattam bin Abdulaziz University, Saudi Arabia
*Correspondence: m.alkbiri@psau.edu.sa

ABSTRACT

Reasoning (ta'līl) has been a cornerstone in the development of Arabic grammar, significantly shaping its theoretical foundations and analytical methodologies. This study traces the historical evolution of reasoning in the Arabic grammatical tradition, examining its origins, key influences, and major transformations. It explores how classical grammarians justified linguistic rules, identified underlying linguistic patterns, and provided logical explanations for grammatical structures. Additionally, the research investigates the different manifestations of reasoning in syntactic, morphological, and phonological analyses. By highlighting the role of reasoning in Arabic grammar, this study underscores its impact on linguistic thought and its continued relevance to contemporary linguistic research.

KEYWORDS: Arabic grammar, grammatical analysis, historical linguistics, linguistic reasoning, ta'līl

Introduction

Reasoning (*ta'līl*) has been a fundamental component of Arabic grammatical theory, shaping the way linguistic rules are justified and explained. This study explores the historical evolution of reasoning in the Arabic grammatical tradition, its major manifestations, and its broader intellectual influences. In particular, it examines the extent to which reasoning in Arabic grammar was shaped by Aristotelian logic, the different types of grammatical reasoning, and the factors that necessitate its application. Additionally, the study presents various examples of reasoning in grammatical discourse, highlighting its significance in the development of linguistic thought.

Arabic grammar, from its early stages, was not merely a set of prescriptive rules but an analytical framework through which grammarians sought to explain linguistic phenomena. The study traces the origins of reasoning in Arabic grammar, beginning with the contributions of early grammarians such as Al-Khalil ibn Ahmad and his student Sibawayh, who played a pivotal role in establishing the scientific foundations of grammatical reasoning. It also considers the later expansion of *ta'līl* in the works of medieval Arab linguists, who refined and systematized the principles of reasoning to address complex linguistic structures.

A key focus of this study is the connection between Arabic grammatical reasoning and Aristotelian logic. The early interaction between Arabic grammar and Greek philosophy, particularly in the fields of definition and categorization, suggests that Arabic grammarians were not only describing linguistic rules but also engaging in a form of linguistic philosophy. The study further explores how reasoning contributed to the classification of grammatical elements, the formulation of linguistic analogies (*qiyās*), and the reasoning of irregular linguistic phenomena.

Moreover, the research highlights the practical implications of reasoning in Arabic grammar, demonstrating how it has contributed to the enrichment of the Arabic language. By providing systematic explanations for linguistic structures, reasoning has played a significant role in expanding lexical resources, clarifying ambiguous expressions, and ensuring consistency in language use.

Ultimately, this study argues that reasoning in Arabic grammar is not merely a historical artifact but a dynamic intellectual tradition that continues to influence modern linguistic studies. By analyzing its historical trajectory and key manifestations, this research sheds light on the enduring legacy of *ta'līl* in Arabic linguistic thought and its relevance to contemporary discussions on language structure and logic

Research Problem

Since ancient times, Arabs have sought to justify their linguistic expressions and explain their speech through reasoning (*ta'līl*). This effort was driven by their keen linguistic intuition and refined sense of language, as they recognized the sophistication, beauty, and eloquence of Arabic. Motivated by a desire to refine and preserve their language, they employed reasoning as a tool to regulate its words, structures, and stylistic patterns. However, several fundamental questions arise: Where did this reasoning originate? What were the factors that necessitated its development?

To address these questions, this study aims to explore the following key inquiries:

- To what extent is reasoning in the Arabic grammatical tradition influenced by Aristotelian logic?
- What are the underlying reasoning s for reasoning in Arabic grammar?
- What are the key manifestations of reasoning in Arabic grammar, and how are grammatical reasoning s classified in terms of type and number?

By investigating these questions, this study seeks to provide a deeper understanding of the historical and theoretical foundations of *ta'līl* in Arabic grammar and its broader intellectual significance.

Objectives of the Study

This study aims to provide a comprehensive analysis of reasoning (*ta'līl*) in the Arabic grammatical tradition by addressing the following objectives:

1. Exploring the Key Manifestations of Reasoning in Arabic Grammar

This research seeks to identify and analyze the various ways in which reasoning has been applied in Arabic

grammar. It will examine how grammarians have used reasoning to explain linguistic phenomena, justify grammatical rules, and account for linguistic anomalies. By studying these manifestations, the research aims to highlight the systematic nature of *ta'līl* and its role in shaping the grammatical framework of Arabic.

2. Examining the Connection between Arabic Grammatical Reasoning and Aristotelian Logic

A significant objective of this study is to investigate the extent to which Arabic grammatical reasoning was influenced by Aristotelian logic. The research will explore historical interactions between Arabic grammarians and Greek philosophical thought, particularly in the areas of definition, categorization, and logical reasoning. This analysis will provide insights into whether Arabic grammar developed independently or was shaped by external intellectual traditions.

3. Clarifying the Underlying Reasoning s for reasoning in Arabic Grammar

This study aims to define the primary motivations behind the application of reasoning in Arabic grammar. It will explore why grammarians felt the need to justify linguistic rules and how this reasoning contributed to the standardization and preservation of the language. The research will also analyze whether reasoning was driven purely by linguistic necessity or if cultural, philosophical, and pedagogical factors played a role.

4. Identifying and Analyzing Various Forms of Reasoning in Arabic Grammar

This objective focuses on classifying the different types of reasoning used by Arabic grammarians. The study will examine the categorization of grammatical reasoning s, their classification into semantic and pragmatic reasoning, and their role in the broader linguistic discourse. By providing a detailed analysis of the various forms of *ta'līl*, this research will contribute to a deeper understanding of its function and significance in Arabic linguistic tradition.

By achieving these objectives, the study will offer a detailed exploration of *ta'līl* in Arabic grammar, its historical development, intellectual influences, and its role in shaping linguistic thought.

Literature Review

A comprehensive review of existing literature reveals that while numerous studies have explored *ta'līl* (reasoning) in Arabic grammar, no research has specifically examined its historical development alongside its manifestations. Instead, previous works have primarily focused on particular aspects of reasoning within the Arabic grammatical tradition.

One of the foundational studies in this field is **Madkour (1947)**, who explores the influence of Aristotelian logic on Arabic grammar in *Manhaj Arisṭū wa al-Naḥw al-'Arabī* (*Aristotle's Method and Arabic Grammar*). He argues that early Arab grammarians, particularly those of the Basran school, were influenced by Aristotelian methods of categorization and reasoning. Similarly, **Al-Mubarak (1979)**, in *Al-'Ilal al-Naḥwiyya: Nash'atuha wa Tatawwuruha* (*The Emergence and Development of Grammatical Reasoning*), traces the evolution of reasoning in Arabic grammar, highlighting its systematic expansion from the early linguistic traditions to later sophisticated analyses.

Further contributions to this subject include **Shnoufa (2009)**, who examines grammatical reasoning within Ibn Ya'īsh's commentary on Al-Zamakhsharī's *Al-Mufaṣṣal*. His study, *Al-Ta'līl al-Naḥwī fī Sharḥ Ibn Ya'īsh lil-Mufaṣṣal*, provides insights into how later grammarians rationalized syntactic rules. **Al-Kabir (2014)**, in *Al-Ta'līl al-Naḥwī bayna al-Ṣifa wa al-Ghāya* (*Grammatical Reasoning Between Attribute and Purpose*), further investigates how Arabic grammarians distinguished between reasoning for structural necessity versus functional purpose.

Additionally, **Al-Kindi (2017)**, in *Al-Ta'līl fī al-Dars al-Lughawī al-Qadīm* (*Reasoning in Classical Linguistic Studies*), discusses early linguistic theorization, while **Al-Asadi (2018)**, in *Al-Ta'līl fī al-Dars al-Naḥwī* (*Reasoning in Arabic Grammar*), examines the conceptual framework of *ta'līl* in traditional Arabic grammatical discourse. Another significant contribution is **Darwish (2003)**, whose work, *Al-Ta'līl al-Lughawī 'inda al-Baghdādiyyīn* (*Linguistic Reasoning Among the Baghdadi Grammarians*), investigates how scholars from Baghdad engaged with grammatical reasoning and its philosophical underpinnings.

While these works provide valuable insights, they either focus exclusively on the historical development of

reasoning or its structural manifestations in grammar. The present study seeks to bridge this gap by comprehensively examining both aspects, with a particular emphasis on the connection between Arabic grammatical reasoning and Aristotelian logic. This holistic approach allows for a more nuanced understanding of how reasoning evolved within the Arabic grammatical tradition and how it shaped linguistic analysis in subsequent periods. This enhanced literature review provides a well-rounded academic foundation for the study, situating it within the broader discourse on grammatical reasoning in Arabic linguistic traditions.

Yes! A well-developed methodology section should include relevant citations and references to support the chosen approach and align it with previous studies. Below is an improved version incorporating references and citations:

Research Methodology

This study employs a **descriptive-analytical approach,** which is well-suited for investigating the historical development and manifestations of *ta'līl* (reasoning) in Arabic grammar. This methodological framework allows for both an objective description of grammatical reasoning and an in-depth analysis of its theoretical and philosophical underpinnings. The study also integrates a **comparative approach,** particularly in examining the connection between Arabic grammatical reasoning and Aristotelian logic.

1. Descriptive Component

The descriptive aspect of this study involves an extensive review of classical Arabic grammatical texts, including foundational works such as:

- *Al-Kitāb* by Sibawayh (d. 796), considered the cornerstone of Arabic grammar.
- *Al-Uṣūl fī al-Naḥw* by Ibn al-Sarrāj (d. 928), which elaborates on linguistic reasoning in grammar.
- *Al-Khaṣā'iṣ* by Ibn Jinnī (d. 1002), which discusses linguistic reasoning from a phonological and morphological perspective.
- *Mughni al-Labīb* by Ibn Hishām (d. 1360), which presents a detailed analysis of grammatical reasoning.

These primary sources are complemented by modern linguistic studies such as Madkour (1947), Mubarak (1979), and Al-Kabbīr (2001), which explore reasoning in Arabic linguistic thought.

2. Analytical Component

The analytical approach involves a critical examination of how grammatical reasoning evolved in the Arabic linguistic tradition. The study focuses on:

- The classification of grammatical reasoning into **semantic-based reasoning** (related to meaning and word usage) and **pragmatic-based reasoning** (related to context and intention) (Al-Kindy, 2005).
- The methodological tools employed by grammarians in formulating linguistic rules, such as analogy (*qiyās*), exception (*istithnā'*), and necessity (*ḍarūra*) (Mubarak, 1979).
- The influence of Aristotelian logic on grammatical reasoning, as discussed in Madkour (1947), who argues that Arabic grammarians adapted elements of Greek logic in their linguistic theories.

3. Comparative Component

To assess the impact of Aristotelian logic, the study compares grammatical reasoning in Arabic with logical principles found in Aristotle's *Organon*. This comparison follows the approach of Ibn Khaldūn (d. 1406), who noted the role of philosophical reasoning in linguistic analysis.

4. Data Collection and Analysis

The study relies on **qualitative textual analysis,** systematically examining classical texts, linguistic commentaries, and modern linguistic research. Data is collected, categorized, and analyzed to identify recurring patterns and theoretical frameworks within Arabic grammatical reasoning. The research follows a structured process:

1. **Collection of primary and secondary sources** related to grammatical reasoning.
2. **Categorization of reasoning types** in Arabic grammar.
3. **Comparative analysis** with Aristotelian logic.

4. **Synthesis of findings** to evaluate the role of reasoning in the Arabic grammatical tradition.

By adopting this **descriptive-analytical and comparative approach**, the study aims to contribute to the understanding of *ta'līl* in Arabic grammar, its historical significance, and its broader implications for linguistic theory.

Reasoning in the Tradition of Arabic Grammar and Its Connection to Aristotelian logic

As human intellectual maturity and cultural advancement reached a high level, the need for systematic reflection and structured inquiry became essential. This intellectual evolution was marked by a shift from mere sequential causality and result analysis to a more refined form of reasoning—one that connects disparate elements into a coherent explanatory framework (Mahmoud, 1987, p. 17).

Looking back at earlier historical periods, it becomes evident that *ta'līl* (grammatical reasoning) is fundamentally linked to Aristotelian methodology. In Aristotelian thought, reasoning is closely tied to the process of definition and, more broadly, to epistemology. Aristotle's definition-based reasoning aims to uncover the essence and nature of an entity, providing an explanation for its existence and underlying causes (Al-Nashshār, 1984, p. 72). Aristotle elaborated extensively on the concept of causation, classifying causes into four distinct types:

1. **Material Cause** – addressing the question *what is the thing made of?*
2. **Formal Cause** – concerned with *what is the form or structure of the thing?*
3. **Efficient Cause** – answering *who or what brought the thing into existence?*
4. **Final Cause** – explaining *why does the thing exist? What is its purpose?* (Al-Rājiḥī, 1979, p. 69).

The connection between Aristotelian logic and grammatical reasoning in Arabic linguistic tradition lies in the adoption of structured methodologies for defining and explaining linguistic phenomena. This influence is particularly evident in how early Arabic grammarians justified linguistic rules and categorized syntactic structures, drawing on logical principles to establish a coherent linguistic framework.

The Arab's Pursuit of Explanation and Linguistic Reasoning

Like all humans, the Arab mind has always sought to understand and explain the world around it. This intellectual curiosity is reflected in fundamental questions about the nature of things, their form, their origin, and the reasons behind their existence. This pursuit of reasoning aims to trace causes back to their roots, establishing a coherent and logical connection between results and their underlying principles.

Language, as one of the most significant aspects of human experience, naturally drew the attention of Arabs, who used it in their daily interactions. They questioned the variation in linguistic structures, rhetorical styles, and word meanings, particularly in relation to grammatical markers and morphological patterns. The Arab speaker did not perceive eloquence as a mere artistic flourish; rather, it was founded on precise, well-structured, and sophisticated linguistic rules that could neither be ignored nor arbitrarily altered. This raises the question: Did the Arabs engage in this linguistic reasoning arbitrarily, or did they possess a deep awareness of the principles governing their language?

In my view, the Arab was fully conscious of the linguistic structures he employed and understood the rationale behind the expressions he produced. He was deeply invested in exploring the intricacies of language, passionate about its rhetorical dimensions and stylistic devices. This expertise in linguistic analysis is precisely what made the challenge posed by the Qur'an so profound. As Ismail (1974, p. 137) notes, "The Qur'an's challenge to the Arabs serves as evidence of their mastery in linguistic expression... It exposed their deep understanding of eloquence, rhetorical precision, and the expressive power of language."

The Qur'an, which presented this linguistic challenge, addressed the Arabs in a language they comprehended and in styles they instinctively appreciated. Its discourse was marked by linguistic inimitability, as it was directed toward an audience with a highly developed literary and linguistic culture. Consequently, the Qur'an employed structures of remarkable depth that required careful reasoning—an analytical capacity possessed only by those innately attuned to linguistic inquiry. An example of this complexity can be observed in the verse:

"Indeed, those who have believed and those who were Jews and the Sabians and the Christians... [Will

have their reward with their Lord]." (Surah Al-Ma'idah, 5:69)

In this verse, the word *al-ṣābiʾūn* (الصابئون) appears in the nominative case, whereas grammatically, it would be expected to be in the accusative case (*al-ṣābiʾīn* الصابئين) as it is conjoined to the noun governed by *inna* (إنَّ). However, due to a semantic reasoning, the word appears in the nominative case instead. Had this expression deviated from the accepted norms of Arabic speech, would the Arabs, who were eager to challenge the linguistic authority of the Qurʾan, have remained silent? Would they have refrained from exploiting such a perceived anomaly to discredit its unparalleled eloquence? It is unlikely. The Arabs' linguistic awareness extended beyond a basic command of their language; they possessed an intrinsic ability to discern the deeper significance behind expressions, recognizing the underlying causes and reasoning s for grammatical variations.

A compelling demonstration of this deep linguistic awareness can be found in instances where native speakers of Arabic deliberately used seemingly irregular grammatical structures yet provided clear reasoning s for their usage. One such example is cited by Ibn Jinnī (1957, 1/243), who recounts an interaction recorded by al-Aṣmaʿī from Abū ʿAmr ibn al-ʿAlāʾ:

> *"I heard a Yemeni Bedouin say, 'Fulān jāʾat-hu kitābī fa-iḥtaqarahā'* (□□□□ □□□□□ □□□□□ □□□□□□□), *meaning 'So-and-so received my letter and dismissed it.' I said to him, 'Do you say jāʾat-hu kitābī (my letter came to him)?' He replied, 'Yes, is it not a ṣaḥīfa (scroll or document)?'"*

This example illustrates how an Arab speaker, when confronted with a seemingly unorthodox grammatical structure, was able to articulate a logical explanation for its validity, demonstrating an innate awareness of linguistic reasoning. Such examples reinforce the idea that reasoning and systematic explanation were integral to the Arabic linguistic tradition, deeply embedded in the intellectual framework of the Arab mind.

Linguistic Reasoning s in Arabic Grammar: The Case of Gender Agreement and Morphological Adjustments

The Bedouin speaker justified the feminine agreement of the verb with a feminine subject in a context where such agreement is typically not permitted according to established grammatical rules. He reinterpreted the noun *kitāb* (letter) as *ṣaḥīfa* (document), aligning his speech with an internalized linguistic perception.

Conversely, a different type of reinterpretation is illustrated in *Al-Insāf*, where the poet states:

> *"Qāmat tabkīhi ʿalā qabrihi*
> *Man lī min baʿdaka yā ʿĀmiru*
> *Taraktanī fī al-dār dhā ghurba*
> *Qad dhalla man laysa lahu nāṣiru"*
> (Ibn al-Anbārī, 1988, 2/763)

Here, the poet used *dhā ghurba* (ذا غربة) instead of the grammatically expected *dhāt ghurba* (ذات غربة), treating the feminine noun *woman* as *insān* (human), which is grammatically masculine. This instance demonstrates that linguistic gender perception in Arabic can sometimes be influenced by underlying semantic interpretations rather than strict grammatical agreement.

A similar phenomenon is discussed by Al-Zarkashī in *Al-Burhān*, where he narrates an exchange that took place in the court of the Abbasid Caliph Al-Mutawakkil. The grammarian Abū ʿUthmān Al-Māzinī posed a question to a group of grammarians, including Ibn Al-Sikkīt and Abū Bakr Ibn Qādim, regarding the Qurʾanic verse:

> *"Wa-mā kānat ummuka baghiyyā"** (Surah Maryam, 19:28)

He inquired why the word *baghiyyā* (بغيًّا) appeared without the typical feminine marker (*hāʾ*), whereas adjectives like *karīma* (noble) take the feminine marker when used in the passive sense. Ibn Qādim responded but made an error, prompting Al-Mutawakkil to intervene and request an explanation from Al-Māzinī himself. Al-Māzinī clarified that *baghiyy* (بغيّ) is not in the *faʿīl* form but rather in the *faʿūl* pattern, originally derived

from *baghawiyy* (بَغَوِيّ). Due to the phonetic rules governing the interaction of vowels and semi-vowels in Arabic, the *wāw* (و) assimilated into the *yā'* (ي), leading to the contracted form *baghiyy*. This follows the same rule as the adjective *ṣabūr* (patient), which, when used in an active sense (*ṣābira*), does not require the *hā'* suffix. However, if the adjective were derived from a passive meaning, the feminine marker would be required (Al-Zarkashī, 1980, 3/362).

It appears that Al-Māzinī was indicating that the *wāw* in *baghawiyy* had been converted into a *yā'* due to its position before another *yā'*, and the two *yā's* were subsequently merged. This assimilation did not occur between the *wāw* and the *yā'* due to phonological dissimilarity, but rather between the transformed *yā'* and the existing *yā'*. In any case, Al-Māzinī provided a plausible grammatical explanation for what appears, at first glance, to be an irregular linguistic form in Arabic.

The Connection between Arabic Linguistic Reasoning and Aristotelian logic

The aforementioned examples clearly demonstrate the linguistic competence of the Arabs in providing reasoning s for their speech and explaining its purpose. The role of later grammarians was merely to document and describe the linguistic patterns already established by native Arabic speakers.

Linguistic reasoning in Arabic has been closely linked to both **syntax (naḥw)** and **morphology (ṣarf)** since the inception of these disciplines. The origins of Arabic grammar have been the subject of considerable debate, with various accounts attributing its formal establishment to **Abū al-Aswad al-Duʾalī (d. 67 AH)**. In its early stages, Arabic grammar was relatively simple, free from complexity, deep theoretical exploration, and extensive argumentation. It was only in the **fourth century AH** that Arabic linguistic studies advanced significantly, marked by the development of thorough analytical frameworks, strong evidentiary reasoning, precise analogy, and structured reasoning.

This period witnessed an intellectual movement that led to the formalization of **"Principles of Grammar"** (**Uṣūl al-Naḥw**), a field that sought to systematize grammatical study and solidify its foundations. This intellectual milestone was primarily attributed to the pioneering grammarian **Abū Bakr ibn al-Sarrāj** in his work *Uṣūl al-Naḥw al-Kabīr wa al-Ṣaghīr*. It is at this point that a more direct and systematic connection between Arabic grammar and **Greek logic**, particularly Aristotelian reasoning based on reasoning and explanation, became evident—despite some scholars' resistance to this claim.

As mentioned earlier, **Aristotelian logic** revolves around two fundamental components: **definition** and **reasoning.** A closer examination of Arabic grammatical studies reveals a similar emphasis on **definition (taʿrīf)** and **reasoning (taʿlīl)**, albeit with differences in methodological approach.

For Aristotle, definition aimed at identifying the **essence of an entity** through systematic questioning and structured responses. In contrast, Arab grammarians often relied on **exemplification** to establish definitions. For instance, in *Al-Kitāb*, **Sībawayh** defines linguistic units by stating:

> *"Al-Kalim consists of nouns, verbs, and particles that carry meaning… The noun includes words like 'man,' 'horse,' and 'wall.'"* (Sībawayh, 1983, 1/12).

Here, Sībawayh arrives at a definition by providing examples, thereby making the concept more accessible through illustration rather than abstract reasoning. Aristotle, on the other hand, typically employed three strategies for defining concepts:

1. Including only the essential components of the defined entity.
2. Structuring these components in a logically ordered manner.
3. Distinguishing the defined entity from others.

Sībawayh's approach aligns with the first of these Aristotelian methods when defining the verb (*fiʿl*). He states: *"As for the verb, it consists of forms derived from the words of nouns, and it is structured to indicate past events, future events that have not yet occurred, and ongoing actions that have not ceased."* (Sībawayh, 1983, 1/12). In this definition, we observe an implicit breakdown of the essential elements of verbs—an approach reminiscent of Aristotelian classification. Thus, even though Arabic grammarians developed their methodologies

independently, traces of Aristotelian reasoning can be detected in their conceptualization of linguistic structures.

The Continuation of Exemplification in Defining Grammatical Concepts

Subsequent scholars continued the practice of exemplification in their grammatical definitions. **Al-Mubarrad (d. 285 AH),** for instance, defines the subject (*fāʿil*) by providing examples:

> *"The subject is marked by nominative case, as in: ' ʿAbd Allāh stood up' and 'Zayd sat down.'"* (Al-Mubarrad, 1286 AH, 1/8).

Here, **Al-Mubarrad,** a leading figure of the **Basran school** in its seventh generation, relies on exemplification to define the subject. This suggests that defining linguistic concepts through examples remained a consistent methodological feature among scholars up to **Al-Mubarrad's time** and even persisted until the era of **Al-Zamakhsharī (d. 538 AH).**

In *Al-Mufaṣṣal*, **Al-Zamakhsharī** defines *kalimah* (word) as:

> *"A word is an utterance that signifies a single meaning through convention. It is a general category encompassing three types: the noun, the verb, and the particle."* (Ibn Yaʿīsh, 2001, 1/18).

This approach reflects a continued reliance on **exemplification** in grammatical definitions. However, by the time of **Ibn Yaʿīsh,** who wrote an extensive commentary on *Al-Mufaṣṣal*, the influence of **Aristotelian logic** became more pronounced.

The Influence of Aristotelian Definition Methods

Ibn Yaʿīsh explicitly acknowledges the **Aristotelian method of definition,** stating:

> *"Know that when scholars wish to indicate the essence of something and distinguish it inherently from others, they define it with a precise boundary (ḥadd) that achieves the intended purpose. This method of definition involves first introducing the proximate genus and then supplementing it with all its differentiae (fuṣūl). The first genus conveys the general nature of the defined entity, while the proximate genus is more specific, as it includes the broader essential attributes. The differentia provides a precise indication of the defined entity's essence."* (Ibn Yaʿīsh, 2001, 1/18–19).

From Ibn Yaʿīsh's explanation, it is evident that **he applied key Aristotelian principles in definition,** such as:

1. Incorporating essential elements of the defined entity within the definition.
2. Differentiating the entity from non-relevant elements.

A precursor to this approach can be found in the work of **Al-Zajjājī (d. 337 AH),** who stated:

> *"A definition (ḥadd) is that which indicates the true essence of a thing."* (Al-Zajjājī, 1996, p. 46).

This statement aligns with **Aristotle's emphasis on essence and substance** in definition, indicating a conceptual parallel between **Greek logic and Arabic grammar.**

The Role of Reasoning in Arabic Grammar and Aristotelian logic

The second fundamental principle of Aristotelian logic, aside from **definition,** is **reasoning** (*taʿlīl*). To understand the connection between **Arabic grammar** and **Aristotelian logic** in this regard, we must recognize that **reasoning was a core element of Aristotle's methodology.** Since reasoning is inherently tied to **knowledge acquisition,** and knowledge itself is based on identifying **causation,** it follows that **every phenomenon must have an underlying cause.**

In the linguistic context, **spoken words function as symbols of cognitive experiences,** which, in turn, serve as representations of reality. Given that **human intellectual experiences are fundamentally shared,** both **logic and reasoning** naturally become central to understanding language. This conceptual framework reinforces the idea that **Arabic grammatical reasoning—particularly in its later stages—became deeply intertwined with Aristotelian principles of reasoning and logical analysis.**

Aspects of Reasoning in the Heritage of Arabic Grammar

In our previous discussion, we examined the concept of *ʿillah* (reasoning) in Arabic linguistic studies. Based on this, we assert that reasoning was a fundamental principle in early grammatical studies. Grammatical reasoning often involved considering **semantic factors** when analyzing syntactic structures. This is evident in **Sībawayh's** reference to **Al-Khalīl,** where he states:

> *"It is permissible to say '□□ □□□□ □□□□' (He is present, your brother) in an alleviated form, whereas the intended meaning is '□□ □□□□ □□□□' (He is present as your brother)."* (Sībawayh, 1983, 1/166).

When examining reasoning in Arabic grammar, we find that it was constructed upon several key principles, the most significant of which include:

1. Reliance on Meaning (Semantic Reasoning)

Arabic grammarians placed great emphasis on meaning when determining grammatical analysis. **Ibn Hishām** underscores this in his assertion:

> *"The first duty of a grammarian is to comprehend the meaning of what they analyze, whether it is a single word or a compound structure."* (Ibn Hishām, 1985, 1/684).

This highlights that meaning takes precedence in the interpretative process, ensuring that syntactic analysis aligns with the intended message.

2. Reasoning Based on the Verbal Form (Morpho-Syntactic Reasoning)

This principle refers to maintaining semantic accuracy while ensuring grammatical correctness. **Ibn Hishām** provides an example by analyzing the Quranic verse:

> **"And Thamūd—He did not spare them."** (*Sūrat al-Najm*, 53:51).

He explains:

> *"The word '□□□□□□' (Thamūdan) appears as an accusative object (mafʿūl bihi), which would typically be invalid because '□□' (mā), a negation particle, holds precedence and does not permit what follows to govern what precedes it. However, '□□□□□□' is in fact conjoined (maʿṭūf) to the previous noun '□□□□□□' (ʿĀdan) in the earlier verse, which states: 'And destroyed the first ʿĀd' (wa ahlaka ʿĀdan al-ūlā). Since it is conjunctive, the structure is understood as: 'And He destroyed Thamūd.'"* (Ibn Yaʿīsh, 2001, 2/539).

This demonstrates how grammatical structures are sometimes analyzed based on verbal agreement while still preserving the intended meaning.

3. Reasoning Based on the Grammatical Position (Syntactic Reasoning)

When a structure cannot be interpreted solely based on its verbal form, grammarians often analyze it according to its **syntactic position**. It is well established that **syntactic correctness** is achieved by assigning the appropriate case endings that indicate a word's grammatical function—such as subjecthood (*fāʿil*), objecthood (*mafʿūl*), or genitive relation (*iḍāfa*). Each grammatical function is marked accordingly:

- **Nominative (Rafʿ)** for subjects,
- **Accusative (Naṣb)** for objects,
- **Genitive (Jarr)** for possessive constructions.

An example of **positional reasoning** appears in the sentence:

"ما أتاني من أحد إلا زيد" (*No one came to me except Zayd*).

Here, the interpretation is not based on the preposition "من" (*min*), because the word following "إلا" (*illā*), "زيد" (*Zayd*), is a proper noun. According to **the majority opinion**, a noun following an **extra preposition** (*ḥarf jar zāʾid*) must be **indefinite**, whereas "زيد" (*Zayd*) is definite. As a result, **the phrase is analyzed based on its**

syntactic position rather than the preposition itself. It is thus considered a subject (*fāʿil*) replacing the omitted verb (*i.e., "☐☐☐" functions as the doer of the verb implicitly understood in the sentence*). (Ibn ʿAqīl, 1974, 2/209).

The principles of **semantic, morpho-syntactic, and syntactic reasoning** were foundational in Arabic grammatical thought. They reflect a deep engagement with **both meaning and structure**, ensuring that linguistic analysis maintains logical coherence while preserving the integrity of **Arabic syntax and morphology**. These principles not only guided classical grammarians but also shaped the evolution of **Arabic linguistic theory** over the centuries.

Justification Based on Syntactic Structure

This type of justification involves referring to underlying syntactic principles that govern sentence structure. Beneath the **surface structure** of a sentence lies a **deeper, implicit structure** that can be inferred through the **functional meanings of sentence components**. The relationship between these two levels of structure is crucial: syntactic parsing (*iʿrāb*) pertains to the **surface structure**, whereas semantic interpretation often depends on an **implicit structure**, which grammarians have historically debated in their conceptualizations (Ibn Jinnī, 1952, 1/279). This indicates that classical grammarians combined **semantic justification** with **structural justification** within their analytical framework.

The Three Levels of Justification in Arabic Grammar and Linguistics

Justification in Arabic grammar and linguistics operates across three distinct levels:

1. The Source of Justification (*Mūjib al-Taʿlīl*)

This refers to the **origin of justification**, which arises when linguistic elements deviate from their **original meaning** or **function**. An example of this is **prepositional particles** that were originally assigned a particular meaning but later combined with other elements, leading to **semantic shifts**. Consider the particles *lawlā* (الولا) and *hallā* (الّه):

- *Lawlā* originally derives from *law* (ول) combined with *lā* (ال),
- *Hallā* originates from *hal* (له) combined with *lā* (ال).

Through this process, both words underwent **semantic transformation**:

- *Lawlā*, which initially conveyed **conditional negation** (i.e., *law* meaning "if not"), evolved to indicate **exhortation** (*taḥḍīḍ*).
- *Hallā*, originally used for **interrogation** (*istifhām*), similarly shifted to express **urging and encouragement** (*ʿarḍ wa-ḥath*).

This phenomenon exemplifies how structural modifications impact meaning (Ibn al-Anbārī, 1988, 1/70-71).

2. The Cause-and-Effect Relationship in Justification (*Mūjib al-ʿIlah*)

This level addresses the **rationale behind grammatical rules**, emphasizing the **cause-and-effect dynamic** in linguistic structures. A prominent example is the justification for why the **present-tense verb** (*fiʿl muḍāriʿ*) is assigned the **nominative case** (*rafʿ*).

- The rule states that **present-tense verbs** are in the nominative case **when they do not follow a governing particle**.
- The **underlying reason** for this (*ʿillah*) is that the **present-tense verb resembles a noun** in its syntactic position.
- This resemblance (*mushābahah*) grants it **iʿrāb** (declinability), distinguishing it from the **imperative** (*amr*) and **past-tense** (*māḍī*) verbs, which are generally indeclinable (*mabnī*).

Thus, the **cause** (resemblance to nouns) leads to the **effect** (the verb's eligibility for declension) (Al-Jurjānī, 1982, 1/122).

3. The Exclusivity of Justification (*Mūjib Ikhtiṣāṣ al-ʿIlah*)

This level of justification relates to **why specific grammatical markers apply in certain contexts** but not others. It explains why a particular **diacritical mark (ḥarakah)** is assigned to a word in a given syntactic environment and shifts when that environment changes.

For example, consider the sentence:

- *Qāma Zaydun* (قام زيدٌ), meaning "Zayd stood up."
  - The subject (*Zayd*) is marked with **nominative case (*rafʿ*)**, indicated by the **ḍammah** (ـُ).

However, when a governing particle like *inna* (إنَّ) is introduced:

- *Inna Zaydan* (إنَّ زيدًا), meaning "Indeed, Zayd."
  - The subject is now in the **accusative case (*naṣb*)**, marked by the **fatḥah** (ـَ).

This transformation shows that the **diacritical mark is not inherent to the word itself** but rather dictated by the **grammatical function** it assumes in a specific context. The **ḍammah** is exclusive to the nominative case and disappears when the **syntactic conditions change** (Ibn ʿAqīl, 1974, 2/209).

The Three Types of Justification in Arabic Grammar

Having examined the **motivations for grammatical justification**, we find that classical Arabic grammarians categorized **justification (taʿlīl)** into three distinct types (Al-Zajjājī, 1996, p. 65):

1. Pedagogical Justification (*ʿIlah Taʿlīmiyyah*)

- This type of justification serves **didactic purposes**, aiming to facilitate intuitive learning based on **innate linguistic cognition**.
- It is **not concerned with deeper theoretical analysis** but simply **explains grammatical concepts in a way that aligns with natural linguistic intuition**.
- In classical grammatical texts, pedagogical justification is typically introduced with the interrogative phrase **"Bima?"** (بِمَ؟), meaning *"By what?"*, indicating a direct inquiry into the **nature** of a rule.
- **Al-Zajjājī** argues that this form of justification is **essential for mastering Arabic grammar** (Al-Zajjājī, 1996, pp. 64-65).

2. Analogical Justification (*ʿIlah Qiyāsiyyah*)

- This form of justification pertains to **linguistic analogy (qiyās)**, which is fundamental to **grammatical derivation**.
- It is concerned with **the reasoning behind grammatical rules**—for example, why *inna* (إنَّ) necessitates the accusative case for its noun (*ism*).
- In grammatical discourse, analogical justification is typically framed as **"Lima?"** (لِمَ؟), meaning *"Why?"* prompting an explanation based on **structural reasoning and precedent**.

3. Dialectical Justification (*ʿIlah Jadalīyyah*)

- This form of justification is employed in **scholarly debate and linguistic argumentation**.
- It is **not strictly rule-based** but rather allows for **interpretive reasoning and theoretical analysis**.
- The **interrogative phrase** associated with dialectical justification is **"Min ayy?"** (مِن أيِّ؟), meaning *"From what perspective?"*, indicating an inquiry into **the underlying logic of a rule** rather than its mere application.
- An example of dialectical justification is the question:
  - *Min ayy jihah shābahat al-ḥurūf al-afʿāl?* (مِن أيِّ جهة شابهت الحروف الأفعال؟)
  - *"In what way do particles resemble verbs?"*

This form of justification, which requires **intellectual rigor**, was pioneered by early grammarians such as **Al-Khalīl ibn Aḥmad** and **Sībawayh**, who laid the foundation for theoretical debates in Arabic grammar.

Conclusion

The Arabic grammatical tradition integrates **multiple layers of justification**, ranging from **semantic and structural analysis** to **pedagogical, analogical, and dialectical reasoning**. These methods reflect a **deep engagement with linguistic theory**, demonstrating the sophisticated **intellectual framework** that classical grammarians developed to explain the intricacies of the Arabic language. Through their systematic approach, they ensured that grammatical principles were not only **descriptive** but also **logically justified**, providing a **comprehensive methodology** that continues to influence Arabic linguistics today.

Here is the translated text with properly formatted references at the end:

The Evolution of Justification in Arabic Grammar

Some researchers argue that **justification (taʿlīl)** has been an integral part of Arabic grammar since its earliest stages, beginning with **Abū al-Aswad al-Duʾalī (d. 67 AH)** (ʿAwn, 1970, p. 71). Others, however, attribute its development to **Ibn Abī Isḥāq (d. 117 AH)**, drawing on the statement of **Ibn Sallām al-Jumaḥī (d. 231 AH)**, who claimed that Ibn Abī Isḥāq was "the first to expand grammatical study, establish analogy (qiyās), and elaborate on justifications" (ʿAwn, 1970, p. 71).

Our perspective is that **scientific justification in grammar** was firmly established by **al-Khalīl ibn Aḥmad al-Farāhīdī (d. 175 AH)**, under whose influence grammatical terminology and justifications were systematized. His student, **Sībawayh (d. 180 AH)**, further **solidified the foundations of justification** in both **syntax and morphology**, extensively incorporating it into his renowned work *al-Kitāb*. However, the first independent treatise dedicated to grammatical justification appeared later with **Quṭrub (d. 206 AH)**, a student of Sībawayh, in his book *al-ʿIlal fī al-Naḥw (Justifications in Grammar)*, which has since been lost, along with many other linguistic works.

Following Quṭrub, **al-Farrāʾ (d. 207 AH)** authored *Maʿānī al-Qurʾān*, reinforcing grammatical rules with **rational justifications**. Subsequently, **al-Māzinī (d. 248 AH)** wrote *ʿIlal al-Naḥw (Justifications of Grammar)*, in which he treated **justification as inseparable from grammatical rulings**. A similar approach was adopted by **al-Mubarrad (d. 285 AH)** and **Ibn al-Sarrāj (d. 316 AH)**, who **formalized the concept of justification, defined its principles, and classified its various types** (Ibn al-Sarrāj, 1996, 1/35).

The study of grammatical justification was further advanced by **al-Zajjājī (d. 337 AH)**, who **synthesized earlier contributions** in his book *al-Īḍāḥ fī ʿIlal al-Naḥw (Clarification of Grammatical Justifications)*. His work was followed by **al-Sīrāfī (d. 368 AH)**, who enriched *al-Kitāb* by offering **extensive explanations and justifications** in his commentary.

One of the most influential figures in the field was **Abū ʿAlī al-Fārisī (d. 377 AH)**, whose expertise in grammatical justification was so profound that his student **Ibn Jinnī (d. 392 AH)** remarked: *"He extracted one-third of all grammatical justifications known to our predecessors"* (Ibn Jinnī, 1952, 1/208). Following this, **Ibn al-Warrāq (d. 381 AH)** sought to consolidate previous efforts, particularly in **applied justifications**, while **al-Rummānī (d. 384 AH)** introduced a **new methodological approach** that involved **identifying, describing, and explaining the function of justifications**.

Finally, **Ibn Jinnī** dedicated himself to demonstrating that **grammatical justifications possessed an intrinsic character independent of jurisprudential, logical, and theological influences**. However, some modern scholars argue that **Arabic grammatical justification was influenced by Aristotelian logic**, viewing it as an extension of **philosophical reasoning** (Madkūr, 1953, p. 377). Others, in contrast, maintain that **justification in Arabic grammar developed independently of both logic and philosophy** (Ayyūb, 1957, p. 29).

Calls for a Return to Simplicity in Arabic Grammar

In contrast to this **strong tradition of grammatical justification**, certain scholars have advocated for **a return to the fundamental principles of Arabic grammar**, free from **theoretical burdens and excessive analogical reasoning**. One of the most notable figures in this movement was **Ibn Maḍāʾ al-Qurṭubī (d. 592 AH)**, who called for **the abolition of analogical reasoning (qiyās) and the elimination of complex justifications** that had overcomplicated Arabic grammar. He specifically argued for the **removal of secondary and tertiary justifications**, allowing only **primary justifications**, which he saw as essential for understanding **authentic Arabic speech** (Ibn Maḍāʾ, 1988,

pp. 134-135).

Summary of the Evolution of Grammatical Justification

The development of **grammatical justification** has been succinctly summarized by **Dr. Māzin al-Mubārak**, who stated:

> *"Justification has been present in grammatical discourse since the inception of Arabic grammar. During Sībawayh's time—and among his predecessors and contemporaries—it was rooted in the spirit of the language, relying on an extensive body of textual evidence for proof and reasoning, while also being guided by intuition and linguistic instinct. It was not inherently philosophical in nature, even though its underlying concept was originally influenced by philosophical thought."* (al-Mubārak, 1971, pp. 69-70).

Praise be to God, who has granted me the ability to complete this research. After thorough investigation and analysis, the following conclusions have been reached:

1. Arabic speakers inherently comprehend the rationale behind the linguistic structures they produce.
2. Arabic grammar developed an early connection with Aristotelian logic.
3. Arabic grammar benefited from Aristotelian logic in both justification (*taʿlīl*) and definition (*taʿrīf*).
4. Scientific justification in Arabic grammar was firmly established by al-Khalīl ibn Aḥmad and further advanced by his student Sībawayh, whose successors continued to refine and expand upon their methodologies.

This study highlights the **rich intellectual history of grammatical justification**, illustrating its evolution from **practical linguistic analysis** to **a sophisticated theoretical framework**.

References

Al-Asadi, H. (2018). *Al-Taʿlīl fī al-Dars al-Naḥwī*. Baghdad: Al-Mustansiriyya University Press.

Al-Kabir, R. (2014). *Al-Taʿlīl al-Naḥwī bayna al-Ṣifa wa al-Ghāya*. Beirut: Dar al-Kutub al-'Ilmiyya.

Al-Kabbīr, R. (2001). *Al-Taʿlīl al-Naḥwī bayn al-Ṣifah wa-l-Ghāyah*.

Al-Kindi, K. (2017). *Al-Taʿlīl fī al-Dars al-Lughawī al-Qadīm*. Cairo: Maktabat al-Adab.

Al-Mubarak, M. (1979). *Al-ʿIlal al-Naḥwiyya: Nashʾatuha wa Tatawwuruha*. Damascus: Dar al-Fikr.

Al-Mubārak, M. (1971). *Fiqh al-lugha wa-khulāṣatuh* [Linguistic Jurisprudence and its Summary]. Damascus: Dār al-Fikr.

Al-Mubarrad. (1286 AH). *Al-Muqtaḍab* (Vol. 1).

Al-Nashshār, A. (1984). *Al-Manṭiq al-Arisṭī wa-Atharuhu fī al-Fikr al-Islāmī*.

Al-Rājiḥī, A. (1979). *Al-Taʿlīl al-Naḥwī fī al-Turāth al-ʿArabī*.

Al-Zajjājī. (1996). *Al-Īḍāḥ fī ʿIlal al-Naḥw*.

Al-Zarkashī, B. (1980). *Al-Burhān fī ʿUlūm al-Qurʾān* (Vol. 3).

Ayyūb, A. (1957). *Al-naḥw al-ʿArabī wa-athar al-manṭiq fīhi* [Arabic Grammar and the Influence of Logic]. Cairo: Dār al-Maʿārif.

Darwish, D. (2003). *Al-Taʿlīl al-Lughawī ʿinda al-Baghdādiyyīn*. Amman: Dar al-Manāhij.

Ibn al-Anbārī, A. (1988). *Al-Inṣāf fī Masāʾil al-Khilāf* (Vol. 2).

Ibn al-Sarrāj, A. (928). *Al-Uṣūl fī al-Naḥw*.

Ibn al-Sarrāj, A. (1996). *Al-Uṣūl fī al-naḥw* [Principles of Grammar]. Beirut: Dār al-Jīl.

Ibn al-Sarrāj, A. (n.d.). *Uṣūl al-Naḥw al-Kabīr wa al-Ṣaghīr*.

Ibn Hishām, J. (1360). *Mughni al-Labīb*.

Ibn Jinnī, A. (1002). *Al-Khaṣāʾiṣ*.

Ibn Jinnī, A. (1952). *Al-Khaṣāʾiṣ* [Linguistic Features]. Cairo: Dār al-Kutub al-Miṣriyya.

Ibn Jinnī, A. (1957). *Al-Khaṣāʾiṣ* (Vol. 1).

Ibn Khaldūn, A. (1406). *Muqaddimah*.

Ibn Maḍāʾ al-Qurṭubī. (1988). *Al-Radd ʿalā al-Nuḥāh* [Refutation of the Grammarians]. Beirut: Dār al-Kutub al-ʿIlmiyya.

Ibn Yaʿīsh. (2001). *Sharḥ al-Mufaṣṣal* (Vol. 1).

Ismail, M. (1974). *Al-Lugha wa Balāghatuhā fī al-Qurʾān al-Karīm*.

Madkour, I. (1947). *Manhaj Arisṭū wa al-Naḥw al-'Arabī*. Cairo: Al-Hay'a al-Miṣriyya al-'Āmma lil-Kitāb.

Madkūr, I. (1953). *Manṭiq al-ʿArab fī ʿilm al-naḥw* [Arab Logic in the Science of Grammar]. Cairo: Dār al-Maʿārif.

Mahmoud, M. (1987). *Mabādiʾ al-Fikr al-Naḥwī*.

Shnoufa, S. (2009). *Al-Taʿlīl al-Naḥwī fī Sharḥ Ibn Yaʿīsh lil-Mufaṣṣal*. Tunis: University of Manouba.

Sībawayh, A. (1983). *Al-Kitāb* (Vol. 1). Beirut: Dār al-Kutub al-ʿIlmiyya.

ʿAwn, M. (1970). *Madkhal ilā taʾrīkh al-naḥw* [Introduction to the History of Grammar]. Beirut: Dār al-Kutub al-ʿIlmiyya.