Article

Prenominal and Postnominal Adjectives in Arabic: A Proposed Analysis

SAGE Open
April-June 2014: 1–8

DOI: 10.1177/2158244014537650
sgo.sagepub.com
SAGE

Mahmoud S. Al Mahmoud[1]

Abstract

This article discusses the status of prenominal and postnominal adjectives in Arabic. It is argued that Kremers's treatment of adjectives is non-economic as it generates two different syntactic representations for prenominal and postnominal adjectives. It also undermines endocentric properties of phrasal projections and fails to correctly predict the definiteness status of adjectival construct state heads. The article proposes an alternative analysis with a single underlying syntactic structure for both types of adjectives. The need to have nominal features of the specifier (Spec) of the agreement phrase head (Agr) checked and licensed within the determiner phrase (DP) triggers leftward noun phrase (NP) movement, thus forming postnominal adjectives. In prenominal adjectives, however, the strong Definiteness Feature (DEF) on the determiner (D) causes the adjective phrase to raise to the specifier of the DP.

Keywords

Arabic adjectives, syntax, linguistics, theoretical linguistics, foreign languages

Introduction

Most of the traditional grammar written on classical Arabic depended on what native speakers of the language judged to be grammatical. However, this form of classical Arabic has seen dwindling interest and the once widely spread and prestigious style of communication is presently confined to religious and some literary texts. Instead, the modern standard Arabic is now prevalent and dominates the media, although its use too is limited to official register and is often learned rather than acquired. Nevertheless, the treatment of prenominal and postnominal adjectives in both classical and modern standard Arabic remains indistinguishable for the most part.

Adjectives in Arabic normally follow the nouns they modify. Thus, the following order is commonly found in Arabic:

(1) Determiner Phrase (DP) + Noun Phrase (NP) + Adjective Phrase (AP).

In (1), both the DP and the NP precede the AP. However, it is the intrinsic property of some adjectives to precede the NP they modify (Fassi Fehri, 1999), yielding the following order:

(2) DP + AP + NP.

This short article expounds on the status of adjectives in Arabic. It argues that Kremers's (2003) analysis of prenominal and postnominal adjectives, which rests on the notion of *definiteness inheritance*, presents a challenge for the X-bar theory, is structurally superfluous and non-economic, and can generate ungrammatical structures. The article sets forth an alternative minimalist account that posits a single underlying structure for both prenominal and postnominal APs. In particular, it is argued that the definiteness feature weakness or strength determines the AP prenominal versus postnominal status in the DP.

Adjectives in Arabic

Positive Adjectives

Positive adjectives usually follow the nouns they modify and agree with them in number, gender, case, and definiteness. Consider the following examples:

(3) *bint-u-n*	*jameel-at-u-n*
girl-nom-indef	pretty-fem-nom-indef
"a pretty girl"	
(4) *al-bint-u*	*al-jameel-at-u*
def-girl-nom	def-pretty-fem-nom
"the pretty girl"	

[1]Imam University, Riyadh, Saudi Arabia

Corresponding Author:
Mahmoud S. Al Mahmoud, Imam University, College of Languages & Translation, Riyadh, 11432, Saudi Arabia.
Email:mssaam@hotmail.com

The adjective *jameel-at-u-n* "pretty" in (3) and *al-jameel-at-u* "the pretty" in (4) both agree with the preceding nouns *bint-u-n* "a girl" and *al-bint-u* "the girl" respectively in number (singular), gender (feminine), case (nominative), and definiteness.[1]

Positive adjectives can, however, occur prenominally in which case they do not bear any case, gender, number, or definiteness agreement with the noun they modify:

(5) *(al)-jameel-u* *al-wajh-i*
def-pretty-nom def-face-gen
"(the one with) the pretty face"

The definite marker on the adjective *(al)-jameel-u* "the pretty" is optional and is not the result of definiteness agreement with the noun *al-wajh-i* "the face." The adjective here with the noun forms a *construct state* (CS; see "Definiteness and the CS" section) as apparent from the genitive case ending *-i* on the nominal complement. It should be noted that the construction in (5) is not very common and is more likely to be found in classical Arabic.

Comparative Adjectives

Comparative adjectives can only occur postnominally, but unlike positive adjectives, they do not agree with the noun preceding them in gender or number.[2] Rather, comparative adjectives have to adhere to the form of *Af'al Attafdheel*[3] and be followed by the *min* "than" prepositional phrase:

(6) *al-bint-u* *(al)-akbar-u* *min* *ukht-i-ha*
def-girl-nom (the)-older-nom than sister-gen-her
"the girl (who) is older than her sister"

(7) *al-awlaad-u* *(al)-akbar-u* *min* *akhawaat-i-him*
def-boys-nom (the)-older-nom than sisters-gen-their
"the boys (who) are older than their sisters"

The comparative adjective *(al)-akbar-u* "(the) older" modifies a singular feminine noun *al-bint* "the girl" in (6) and a plural masculine noun *al-awlaad-u* "the boys" in (7). Although the adjective has to agree with the noun in case, agreement in number, gender, or definiteness is non-obligatory.

Superlative Adjectives

The superlative adjective is constructed in Arabic using the singular genderless *Af'al* form. However, unlike comparative adjectives, superlatives are unique in Arabic in that they can occur prenominally or postnominally:

(8) *al-walad-u* *al-akbar-u*
def-boy-nom def-oldest-nom
"the oldest boy (of a known group of boys)"

(9) *akbar-u* *walad-i-n*
oldest-nom boy-gen-indef
"the oldest boy"

(10) *akbar-u* *al-awlaad-i*
oldest-nom def-boys-gen
"the oldest of the boys"

In (8), the superlative adjective *al-akbar-u* "the oldest" follows the noun *al-walad-u* "the boy" and shows agreement in definiteness and case. However, in (9) and (10), the superlative precedes the nouns *walad-i-n* "boy" and *al-awlaad-i* "the boys" but shows neither definiteness nor case agreement. In both (9) and (10), the adjective constitutes the head of a CS with the following NP as the genitive complement. Lipinski (1997) discussed the various types of adjectives in Semitic languages (see also Abd Al-Ghani, 2000; Qanbaar, 1988, among others). He states that the pattern *Af'al* is used for the superlative and may then take the definite article as in (8) or be defined by a genitive as in (9) and (10). In its prenominal use, the superlative adjective conveys a greater degree of the attribute compared with postnominal superlatives (Kremers, 2003).

Construct State

There is little discussion in the literature of the adjectival CS. Most of the work centers on the nominal CS, mainly in Hebrew and Arabic (Fassi Fehri, 1999; Siloni, 1997 among others). A CS is the structure where the noun or the adjective is annexed to a genitive DP. Moscati (1964) defined the CS as

> the special form taken by a noun when it is defined by a following genitive (or prenominal suffix). The two nouns cannot be separated, though there are certain exceptions to this rule. (pp. 100-102)

The CS can be either nominal composed of the head noun followed by the genitive DP as in (11), or it can be adjectival in which case the head adjective is annexed to the genitive DP as shown in (12):

(11) *Nominal CS.*
qalam-u *al-walad-i*
pen-nom def-boy-gen
"the boy's pen"

(12) *Adjectival CS.*

akbar-u	*walad-i-n*
oldest-nom	boy-gen-indef

"the oldest boy"

The NP construction in (11) expresses possessiveness. The CS head *qalam-u* "pen" (the possessed) assigns its complement the DP *al-walad-i* "the boy" (the possessor) the genitive case *-i*. The adjectival CS in (12) is very similar to the nominal one structurally but rather expresses the superlative meaning of the adjective; the adjective *akbar-u* "oldest" is the head of the CS, and the noun *walad-i-n* "boy" is the genitive DP complement.

The genitive case on the CS DP complement is believed to be structural because the genitive DP can assume different thematic roles in Arabic. It can be the subject, possessive, object, or agent in a sentence. Lindauer (1995) argued that the German genitive can have numerous thematic roles and thus concluded that the DP genitive case is structural. Similarly, Longobardi (1995) and De Wit (1997) argued that if the genitive noun can assume a number of theta roles, then the genitive case is structural.

Definiteness and the CS

Traditionally, grammarians stipulate that the superlative form of the adjective be definite (and singular). Moscati (1964) noted how the CS in Semitic languages is closely connected with the function of definiteness and indefiniteness (see also Borer, 1984; O'leary, 1969). When postnominal, the superlative bears the overt definiteness marker *al* "the" as in (8). However, in its (CS) prenominal use, it acquires definiteness via annexation to the complement regardless of the DP definiteness status as in (9) and (10). In other words, the superlative adjective in Arabic has to be always definite either via prefixation of the definiteness article or by constituting the CS head.

Evidence for the inherent definiteness of CS heads can be found for example in the ungrammaticality of the following:

(13) **al-akbar-u* *walad-i-n*

def-oldest-nom boy-gen-indef

"the oldest boy"

(14) **al-akbar-u* *al-awlaad-i*

def-oldest-nom def-boys-gen

"the oldest of the boys"

The ungrammaticality of (13) and (14) is due to *double definiteness* of the superlative by the definite article *al-* "the" and by being the head of the CS. As stated above, because prenominal superlatives constitute the first element of a CS, they are inherently definite, and as such, cannot realize the overt definiteness marker.[4]

Further evidence for definiteness of the CS can be found in the use of adjectives modifying nominal heads in DP-possessive structures:

(15) *qalam-u* *al-walad-i* *al-jadeed-u*

pen-nom def-boy-gen def-new-nom

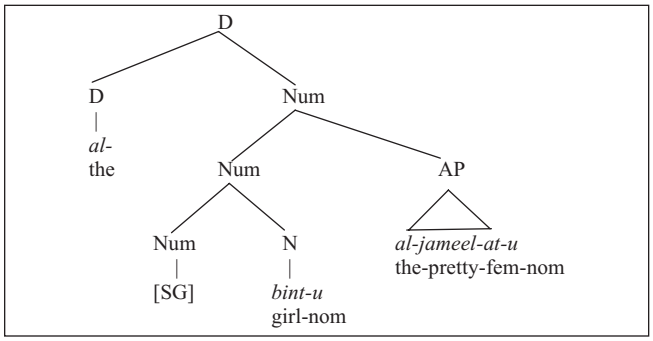
"the boy's new pen"

The positive adjective *al-jadeed-u* "the new" in (15) describes *qalam-u* "pen" and agrees with it in number (singular), gender (masculine), definiteness (definite), and case (nominative). Such definiteness agreement on the adjective argues that the CS head *qalam-u* "pen" is in fact definite.

Kremers's Analysis of Postnominal and Prenominal Adjectives

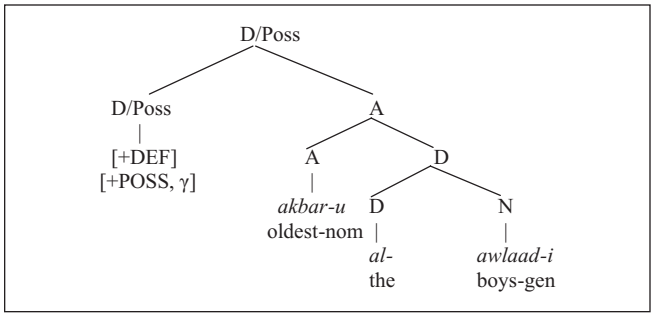
Kremers (2003) proposed an analysis of postnominal and prenominal adjectives in Arabic according to which two syntactically different structures are posited. Consider the following representation of the positive and superlative adjectives stated earlier in (4) and (10), respectively:

(16) *Postnominal adjectives*.



In (16), the positive adjective *al-jameel-at-u* "the pretty" constitutes the AP that occurs after the noun *al-bint-u* "the girl" and is syntactically adjoined to the right of the number (Num) phrase. Whereas (16) is proposed for postnominal adjectives, the representation in (17) below is proposed for prenominal adjectives:

(17) *Prenominal adjectives*.



In (17), the superlative adjective *akbar-u* "oldest" precedes the DP *al-awlaad-i* "the boys." On par with the nominative and accusative case assignment of the subject and the object by T and by little *v*, respectively, (Chomsky, 1995) and given the fact that genitive case assignment is structural, the genitive case is therefore assigned by a functional head, namely, possessive (POSS) (Delsing, 1993; Longobardi, 1995; Szabolcsi, 1994; Valois, 1991). Kremers (2003) assumed that the POSS head is a projection of the feature POSS that has the value [±POSS] and determines whether the head adjective in the construction has a DP dependent. If the value of POSS is set as [+POSS], then it carries an additional set of unvalued γ features that need to be valued via an *Agree* relation with the DP complement that is assigned the genitive case:

> The head Poss has the value [+POSS] in addition to a set of unvalued γ-features. Because the γ-features are unvalued, Poss is active and tries to value these features. It probes its c-command domain for an active match; it finds a match in the complement DP which is active because it has an unvalued CASE feature. A match is established and the unvalued features of both sides are valued. (p. 37)

The assumption is that in a CS structure, the feature POSS must always be valued as [+] that requires a set of unvalued γ features to be valued through *Agree*. The unvalued γ features are matched with the unvalued CASE feature (genitive) of the DP complement.

Kremers (2003), after Fassi Fehri (1999), assumed that the head of a CS is unmarked for definiteness. That is, it has neither the definite article *al-* "the" nor the indefinite marker *-n*. Instead, the CS head receives its definiteness value via *definiteness inheritance* from its complement DP. If the genitive DP is definite as in (18), then the head noun, namely, *darraaj-at-u* "bike" would be definite and if the DP complement is indefinite as in (19), then the head noun will be indefinite as can be discerned from the definiteness status of the modifying adjective in the following examples:

(18) *darraaj-at-u* *al-awlaad-i* *al-sareeʕ-at-u*
bike-fem-nom def-boys-gen def-fast-fem-nom
"the boys' fast bike"

(19) *darraaj-at-u* *awlaad-i-n* *sareeʕ-at-u*
bike-fem-nom boys-gen-indef fast-fem-nom
"boys' fast bike"

Given the agreement in case, definiteness, gender, and number between postnominal adjectives and the nouns they modify, the definiteness of the adjective *sareeʕ* "fast" in (18) and its indefiniteness in (19) result from its agreement with the CS head *darraaj-at-u* "bike." One may be led to believe that agreement with the DP complement *awlaad-i-n* "boys" is what determines the adjectival definiteness. This is not the case, however, as the adjective *(al)-sareeʕ-at-u* "(the) fast" shows case, number as well as gender agreement with the CS head and not with the genitive DP. The adjective has the same nominative *-u*, not genitive *-i*, case as the first element of the CS *darraaj-at-u* "bike"; is not plural as the DP complement; and carries the same feminine marker as the CS head, namely, *-at*.

Furthermore, Kremers assumes that *definiteness inheritance* is a result of *Agree.* The DEF feature gets valued in the course of the derivation through *Agree*. D enters the derivation with a valued or unvalued DEF depending on the value of the POSS feature. In other words, if POSS has the value [−POSS] (i.e., when the head noun has no genitive complement), DEF enters the derivation already valued as either the definiteness marker *al-* "the" or the indefiniteness marker *-n*. However, if POSS is valued as [+POSS], DEF is unvalued with neither the definite article *al-* nor the indefinite marker *-n*.

Discussion

Kremers's (2003) analysis outlined in (16) and (17) is structurally non-economical as it postulates two markedly different syntactic representations for prenominal and postnominal APs. Second, the analysis assumption of a *hybrid* category with two heads, namely, D/POSS, in the NP is unattractive. It compromises the endocentric property of X-bar phrases that requires "all phrases be headed by one head" (Haegeman, 1994, p. 105), and "every head project a phrase and that all phrases have heads" (Hornstein, Nunes, & Grohmann, 2005, p. 168). Third, the two features of the hybrid category D/POSS inexplicably stand in a converse relationship: When POSS has the value [+POSS], DEF is *forced* to remain unvalued and vice versa. It is not clear what causes this trade-off between the two features.

Moreover, the stipulation that [+POSS] renders DEF unvalued and must therefore appear *without* the definite *al-* or indefinite *-n* marker seems to be contradicted by the kind of data mentioned in "Positive Adjectives" section (repeated here in (20) for convenience):

(20) *(al)-jameel-u* *al-wajh-i*
def-pretty-nom def-face-gen
"(the one with) the pretty face"

Although the definite article on the CS head adjective *(al)-jameel-u* "(the) pretty" is optional, (20) still presents a problem for Kremers's (2003) analysis that mandates that POSS be always valued as [±POSS] whenever in CSs. Such condition requires DEF also to be unvalued (i.e., without the definite article *al-* "the" or the indefinite marker *-n*). However, this is not the case in (20) as the DEF feature *is* indeed valued for definiteness with the definite article *al-* being realized, albeit optionally, on the adjective *(al)-jameel-u* "(the) pretty." In other words, positive prenominal adjectives pose serious problems for an analysis that assumes a value mismatch between POSS and DEF.

Finally, the notion of CS heads acquiring definiteness from DP complements (*definiteness inheritance*) seems to be undermined by examples involving conjoined adjectives such as the following:

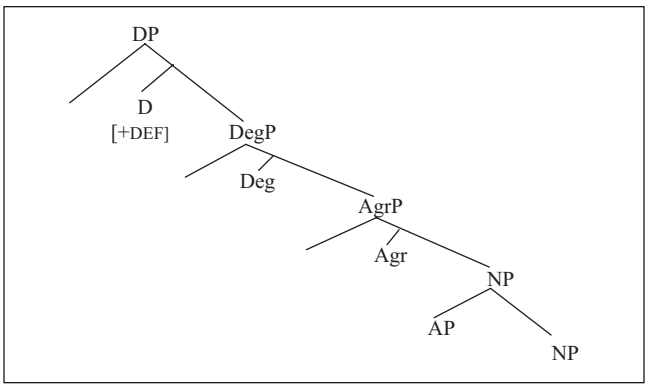
(21) *ajmal-u* *bint-i-n* *wa** *(al)-atwal-u*
pretties-nom girl-gen-indef and def-tallest-nom
"the prettiest and tallest girl"

Recall that under *definiteness inheritance*, the definiteness of the CS head is dependent on and acquired by the genitive DP complement. CS heads inherit their definiteness value from the complement to which they are annexed (i.e., if the CS complement is definite, the head would be definite and vice versa). Thus, in (21), the CS head *ajmal-u* "prettiest" is predicted to be indefinite after its DP complement *bint-i-n* "girl." However, note that the conjoined adjective *al-atwal-u* "the tallest" in (21) is in fact definite and carries the same nominative case ending *-u* as the CS head adjective *ajmal-u* "prettiest." Clearly *al-atwal-u* "the tallest" cannot be in agreement with the CS complement *bint-i-n* "girl" because the latter has different case (genitive *-i*) and gender (feminine) endings, and is specified for indefiniteness (*-n*). Therefore, it follows that the definiteness on the adjective *al-atwal-u* "the tallest" in (21) results from agreement with the superlative CS head *ajmal-u* "prettiest." This indicates that the CS head adjective in (21) is indeed definite although overt definiteness morphology is lacking. To sum up, a *definiteness inheritance* analysis fails to account for the inherent definiteness of CS heads as it would incorrectly predict the CS head adjective *ajmal-u* "prettiest" in (21) to be indefinite based on the indefiniteness of the DP complement *bint-i-n* "girl."

Proposed Analysis

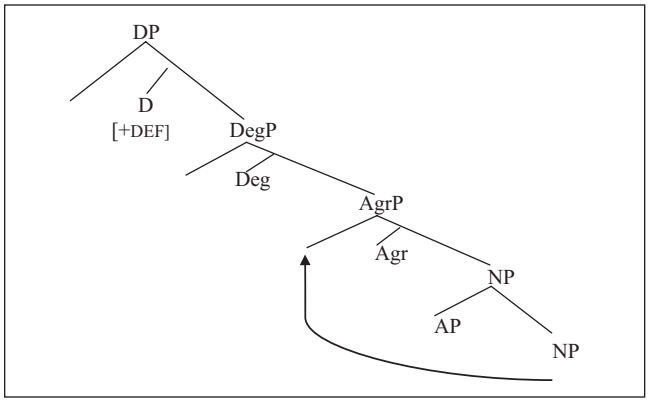
Rather than positing two different structures in the analysis of prenominal and postnominal adjectives, an alternative analysis that makes reference to one unified syntactic structure is proposed. The following tree schema is suggested for both prenominal and postnominal adjectives in Arabic:

(22) *Syntactic representation of prenominal and postnominal adjectives in Arabic.*



To explain how postnominal and prenominal adjectives can be derived from the tree diagram in (22), consider the following representation for postnominal adjectives:

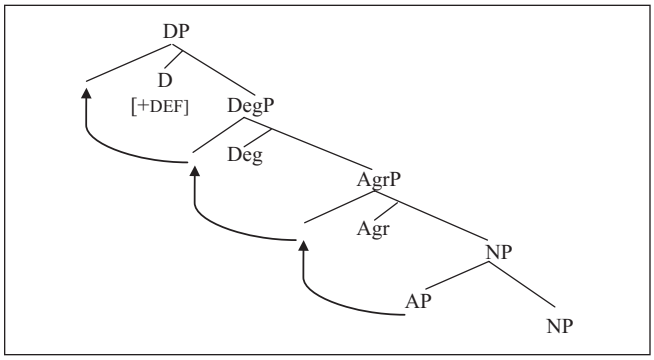
(23) *Syntactic representation of postnominal adjectives in Arabic.*



The NP in (23) raises to the specifier of the agreement phrase (AgrP). I assume after Cinque (2005) that what is triggering the NP movement is the need for extended projections of the NP to be licensed. I also assume, after Koizumi (1995) and the argument made therein for the existence of agreement phrases in Minimalist Syntax, that the head category Agr has a maximal projection, namely, AgrP. In (23), the AgrP specifier's need for a nominal feature to be licensed within the DP triggers the movement of the NP to [Spec-Agr].[5] I assume further that D has a weak DEF (definiteness) feature that does not cause the movement of the AP to the specifier of the DP. However, to account for the elative form of postnominal superlatives, I assume that the adjective acquires the elative morphology by entering an *Agree* relation with [Spec-DegP] (Chomsky, 2000).

Now consider the following tree structure for prenominal adjectives:

(24) *Syntactic representation of prenominal adjectives in Arabic.*



The tree structure of prenominal adjectives in (24) is identical to that of postnominal adjectives in (23); however, contrary to (23), D is said to have a strong DEF feature in (24) that triggers the movement of the AP to the specifier of the DP. The AP undergoes movement first to [Spec-AgrP] then to [Spec-DegP] to acquire the elative (or superlative) morphology[6] and ultimately to [Spec-DP] to check the strong definiteness feature on the determiner. Being in a spec-head relation with the determiner, the adjective acquires definiteness and functions as a *determiner* in the sense that it singles out the most salient member of a set. Because the AP movement blocks the movement of the NP to the specifier of the agreement phrase, [Spec-AgrP] has to acquire the nominal feature that licenses its presence in the DP some other way. Following Cinque (2005), I assume that licensing is done through *Merge*. That is, the specifier of the agreement phrase acquires the nominal feature through an *Agree* relation with the NP. In this manner, the extended projection of the NP is licensed without resorting to movement of the NP to [Spec-AgrP], which would otherwise be impossible due to [Spec-AgrP] being already occupied with the AP.

Note that the analysis proposed in (22), unlike that of Kremers (2003), does not resort to hybrid maximal projections. The maximal phrase is headed by one single head, namely, D, which is a projection of the DP; thus, endocentricity of phrasal projections in the X-bar theory is respected. In addition, problematic data for the *definiteness inheritance* approach are easily accounted for under this analysis. Consider the NP in (21) above where, contra to definiteness inheritance, the adjective *ajmal-u* "prettiest" was argued to be definite although its genitive DP complement is not. According to (22), the adjective *ajmal-u* "prettiest" moves first to [Spec-AgrP], then to [Spec-DegP] to acquire the elative form, and eventually to [Spec-DP] for checking the strong definiteness feature in D.

Finally, it is more adequate for economy considerations to postulate a unified syntactic representation for both to different but related APs. The thrust of the argument is that the syntactic representations in (23) and (24) are isomorphic and the distinction between prenominal and postnominal adjectives is syntactically reduced to the featural strength of the definiteness feature on the determiner. In other words, the choice of whether an adjective occurs prenominally or postnominally is constrained by the definiteness feature in D. If D has a weak definiteness feature, then the AP is postnominal, and if D has a strong definiteness feature, then the AP is prenominal.

Evidence for Noun Phrasal Movement in Postnominal Adjectives

Taking into account postnominal adjectives, the analysis proposed in the previous section assumes the movement of the whole NP to the specifier of the agreement phrase. Evidence for such movement of the NP can be found in constituency tests designed to reveal the syntagmaticity and wholeness of a syntactic unit. For space limitations, I consider here two tests of constituency: modification and coordination.

Noun Complement Modification

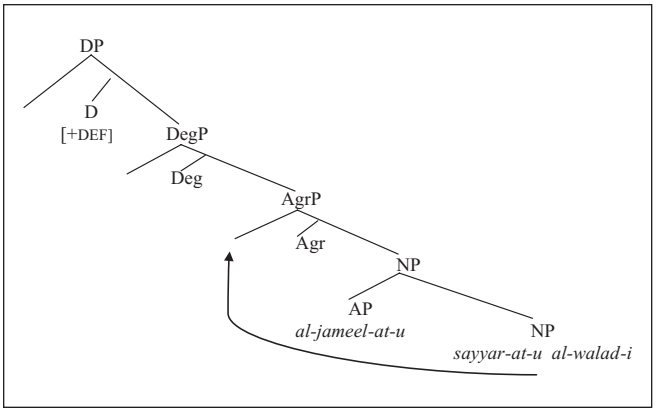
Recall that the underlying representation or the deep structure (DS) for postnominal adjectives places the modified NP to the right of the AP before moving it to the left of the adjective at the surface structure (SS) level:

(25) **DS:** *al-jameel-at-u* *sayyar-at-u* *al-walad-i*
def-pretty-fem-nom car-fem-nom def-boy-gen

SS: *sayyar-at-u* *al-walad-i* *al-jameel-at-u*
car-fem-nom def-boy-gen def-pretty-fem-nom
"the boy's beautiful car"

In (25), the CS head *sayyar-at-u* "car," along with its genitive complement *al-walad-i* "the boy," moves to a preadjectival position. The derivation that takes place in (25) is depicted in the following tree diagram:

(26) *Syntactic representation of postnominal adjectives in Arabic*.



Now consider the following example where the NP undergoes partial movement:

(27) **sayyar-at-u* *al-jameel-at-u* *al-walad-i*
car-fem-nom def-pretty-fem-nom def-boy-gen
"the boy's beautiful car"

The ill-formedness of (27) stems from the head of the CS *sayyar-at-u* "car" moving to the spec of AgrP without its genitive complement *al-walad-i* "the boy." The example in (27) can only be grammatical if the whole NP (the noun

along with its complement) moves to [Spec-AgrP]. The constituency of the NP as exemplified here can be taken as evidence for whole noun phrasal movement rather than head movement to the specifier of the agreement phrase in postnominal adjectives.

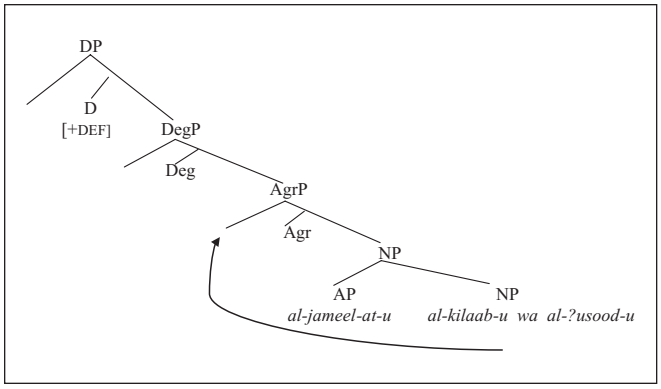
Coordination

As mentioned earlier, movement to the spec of the agreement phrase targets whole NPs rather than single nominal heads. Therefore, in NPs made up of two or more conjoined nouns, the single head along with its coordinated noun is expected to undergo movement as in (28):

(28) **DS:** *al-jameel-at-u* *al-kilaab-u* *wa* *al-?usood-u*
def-pretty-fem-nom def-dogs-nom and def-lions-nom
SS: *al-kilaab-u* *wa* *al-?usood-u* *al-jameel-at-u*
def-dogs-nom and def-lions-nom def-pretty-fem-nom
"the pretty dogs and lions"

Note the full agreement between the two coordinated nouns *al-kilaab-u* "the dogs" and *al-?usood-u* "the lions" in case, number, and definiteness. According to the analysis of postnominal adjectives so far proposed, the NP constituent left-joins the specifier of AgrP as shown in the following diagram:

(29) *Syntactic representation of postnominal adjectives in Arabic*.



In (29), the entire NP moves to [Spec-AgrP] where it is modified by the adjective *al-jameel-at-u* "the pretty." Partial NP movement, however, would render the structure ill-formed:

(30) **al-kilaab-u* *al-jameel-at-u* *wa* *al-?usood-u*
def-dogs-nom def-pretty-fem-nom and def-lions-nom
"the pretty dogs and lions"

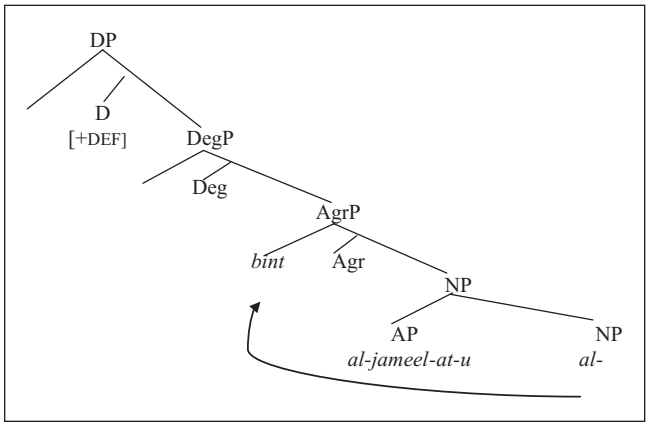
The illicitness of (30) is due to raising the noun *al-kilaab-u* "the dogs" to [Spec-AgrP] without the coordinated noun *al-?usood-u* "lions." This presents further evidence that the movement involved in (23) cannot be single head movement of the noun.

Finally, the fact that when NP-to-[Spec-AgrP] movement occurs, it always affects the determiner *al-* "the" lends more credence to the claim that phrasal rather than single head movement takes place in postnominal adjectives as shown in the ungrammaticality of the following example:

(31) **bint* *al-jameel-at-u* *al-*
girl def-pretty-fem-nom def-
"the pretty girl"

The NP in (31) moves without its determiner *al-* "the" to the specifier of the agreement phrase as illustrated in (32):

(32) *Syntactic representation of postnominal adjectives in Arabic*.



The diagnostics above indicate that the noun movement in postnominal adjective constructions is indeed a movement of the maximal projection NP rather than a movement of the head N.

Conclusion

This article has dealt with postnominal and prenominal adjectives in Arabic. It was argued that although Kremers's (2003) analysis captures some generalizations of the CS in Arabic, it is not without its shortcomings. It presents a serious challenge to one important endocentric tenant of the X-bar theory: single head projection of phrases. Furthermore, in addition to assuming two distinct syntactic representations for postnominal and prenominal adjectives, the analysis fails to account for some new emergent data. In particular, definite adjective conjunctions with CS heads pose some problems for a *definiteness inheritance* account. An alternative minimalist approach with one unified syntactic representation accounts for prenominal and postnominal

adjectives. Strong definiteness of D in prenominal adjectives triggers AP movement to [Spec-DP], whereas lack of it and the need for nominal features within the DP to be licensed in postnominal adjectives trigger NP movement to [Spec-AgrP]. Tests of constituency, namely, NP modification and coordination, provide clear evidence for NP-phrasal vis-à-vis single head movement to the specifier of the agreement phrase.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) received no financial support for the research and/or authorship of this article.

Notes

1. The definite marker in Arabic is the prefix *al-* "the." Indefiniteness is signaled by the clitic "*-n*," a nunation marker that appears after case on indefinite nouns and proper names.
2. Agreement in definiteness with the noun is optional, and different readings may be obtained depending on whether the adjective bears the definite article *al-* "the" or not. One of the reviewers noted that a zero-copula reading of the examples in (6) and (7) emerges when the comparative adjectives are indefinite. In such case, the adjectives would be predicative. However, a noun phrase (NP) reading is obtained when the adjectives are definite and are considered, therefore, attributive.
3. The form *Af'al* is used to derive comparative as well as superlative adjectives from positive adjectives in Arabic, for example, the comparative/superlative form of the positive adjective *jameel* "pretty" is *ajmal* "prettier/prettiest." *Af'al* can also be used to express exclamation in Arabic.
4. Similarly, in nominal construct states (CS), the head noun cannot bear the definite article as it is already defined by annexation to the complement:
   **al-qalam-u al-walad-i*
   def-pen-nom def-boy-gen
   "the boy's pen"
5. Cinque (2005) also maintained that in addition to NP movement, [Spec-AgrP] can acquire the nominal feature by *Merge* that enters an *Agree* relation with the NP without movement. He pointed out that whereas some languages use movement and others use *Agree*, still some make use of both.
6. Where the adjective appears in the non-elative form (i.e., positive prenominal adjectives), I assume that Deg has null elative morphology.

References

Abd Al-Ghani, A. (2000). *Annahuw Al-Kafi*. Beirut, Lebanon: Daar Alkutb Alilmyyah.

Borer, H. (1984). *Parametric syntax*. Dordrecht, Netherlands: Foris Publications.

Chomsky, N. (1995). *The minimalist program*. Cambridge, MA: MIT Press.

Chomsky, N. (2000). Minimalist inquiries: The framework. In R. Martin, D. Michaels, & J. Uriagereka (Eds.), *Step by step: Essays in minimalist syntax in honor of Howard Lasnik* (pp. 89-155). Cambridge, MA: MIT Press.

Cinque, G. (2005). Deriving Greenberg's Universal 20 and its exceptions. *Linguistic Inquiry*, *36*, 315-333.

Delsing, L. O. (1993). *The internal structure of noun phrases in the Scandinavian languages: A comparative study* (Doctoral thesis). University of Lund, Sweden.

De Wit, P. (1997). *Genitive case and genitive constructions* (Doctoral thesis). Utrecht, Netherlands: Utrecht University.

Fassi Fehri, A. (1999). Arabic modifying adjectives and DP structures. *Studia Linguistica*, *53*, 105-154.

Haegeman, L. (1994). *Government and binding theory*. Oxford, UK: Blackwell.

Hornstein, N., Nunes, J., & Grohmann, K. (2005). *Understanding minimalism*. Cambridge, UK: Cambridge University Press.

Koizumi, M. (1995). *Phrase structure in minimalist syntax* (Doctoral dissertation). MIT Press, Cambridge, MA.

Kremers, J. (2003). *The Arabic noun phrase, a minimalist approach* (Doctoral thesis). Nijmegen, Netherlands: University of Nijmegen.

Lindauer, T. (1995). *Genitivattribute: Eine morphosyntaktische Untersuchung zum deutschen DP/NP-System* [Genitive Attributes. A morphosyntactic investigation of the German DP/NP-System. Tübingen, Germany: Niemeyer.

Lipinski, E. (1997). *Semitic languages*: *Outline of a comparative grammar*. Leuven, Belgium: Peter Publications and Department of Oriental Studies.

Longobardi, G. (1995). A case of construct state in Romance. In R. Ajello & S. Sani (Eds.), *Scritti Linguistici e filologici in onore de Tristano Bolelli* (pp. 293-329). Pisa, Italy: Pacini.

Moscati, S. (1964). *Comparative grammar of the Semitic languages*. Wiesbaden, Germany: Otto Harrassowitz.

O'leary, L. (1969). *Comparative grammar of the Semitic languages*. Amsterdam, The Netherlands: Philo Press.

Qanbaar, A. (1988). *Alkitab: Kitab Sibawayih* [The book: Book of Sibawayih. (Vol. II). Cairo, Egypt: Maktabat Al-Khanji.

Siloni, T. (1997). Event nominals and the construct state. In L. Haegeman (Ed.), *New comparative syntax* (pp. 165-188). New York: Longman.

Szabolcsi, A. (1994). The noun phrase. In F. Kiefer & K. Kiss (Eds.), *The syntactic structure of Hungarian* (pp. 174-197). San Diego, CA: Academic Press.

Valois, D. (1991). *The internal syntax of DP* (Doctoral dissertation). University of California, Los Angeles.

Author Biography

Mahmoud S. Al Mahmoud has an MS in Linguistics from Georgetown University, and a PhD in Linguistics from Michigan State University. He is currently an Assistant Professor of Linguistics at Imam University, Riyadh, Saudi Arabia.