

Mixed Order Cases in the Arabic Determiner Phrase (DP)

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Abstract

By ‘mixed order cases’ in the Determiner Phrase (DP) in Arabic (and other languages) is meant the order where modifiers appear both before and after the noun. These mixed order cases have always been analyzed in terms of partial N(P) movement to intermediate positions within an ordinary DP structure (as opposed to a Construct State (CS) DP structure) (Cinque 1996, 2000, 2003, Fassi Fehri 1999, Kremers 2003, Shlonsky 2000, among others).

In this paper I argue that the so-called “mixed order cases” are actually Construct State (CS) DPs (or what is known in Arabic traditional grammar as *Haalatu I-iDaafah*) and that the so-called “prenominal modifiers” are actually (multiple) heads of the CS construction whose annex is the noun (and its postnominal modifiers). That is, I argue that the pre and post nominal modifiers belong to different DPs, which form together one complex DP, and that the pre nominal modifiers are *heads* of the (multiple) CS DP and that the noun and the post nominal modifier(s) belong(s) to an independent DP of the “ordinary type” which is selected by (the most embedded modifier in the series of) the pre nominal modifier(s) to form a CS construction with it. To support these arguments I show that “mixed order cases” in the Arabic DP have exactly the

The other two possibilities being modifiers appearing exclusively in the pre or post nominal position are also possible.

The question that has occupied the minds of linguists dealing with these structures is how such structures are derived. The following section reviews some of the proposals that have been made to account for the derivation of such structures.

Theoretical Framework:

Let us first start with reviewing the earlier analyses that have been proposed to account for the derivation of the so-called ‘mixed order cases’.

Fassi Fehri (1999), for example, argues that the mixed order cases “provide instances of ‘intermediate’ derivations, where various nominal constituents (including the head N and the modifying Adjective Phrase (AP) are located (in Mirror Image Order (MIO) to the right of various pre nominal constituents (which observe direct hierarchical ordering)” (p. 148). This means that ‘mixed order cases’ for Fassi Fehri result when N movement across the modifiers (which appear in the pre nominal position in the underlying representation) stops at some point in the derivation and does not continue to its final destination, the highest *d* in his *dp*

system. In other words, the noun moves only around some of the modifiers as follows:

2) $d > \dots D \dots > \dots \text{CardP} \dots > \dots N_i \dots > \dots \text{AP} > \dots t_i$

To account for the so-called mixed order cases, Kremers

(2003) supposes that the Semitic DP is configured roughly as in (3), where AP, CardP and PP_{gen} are specifiers of functional heads.

Then, in the mixed order examples like the one in (1) above, N can be taken to obligatorily raise to a head position above AP and below CardP, thus:

3) $D \dots > \dots \text{CardP} \dots > \dots \text{AP} \dots > \dots \text{PP}_{\text{gen}} \dots > \dots N$

Discussing numerals in the Semitic DP, Shlonsky (2000) tries to derive these ‘mixed order cases’ from the underlying structure of a single DP, taking the different possible word orders to be the result of “different degrees of N(P) raising” (p.11).

Cinque (2003), on the other hand, derives the so-called mixed order cases via partial NP movement around some of the modifiers, more or less like Fassi Fehri (1999) and Kremers (2003).

As one can see, the common trait that these proposals share is that they assume that the syntactic status of all the modifiers in such structures is the same. That is, they assume that

all the modifiers in the pre and post nominal positions in such structures start as *specifiers* of universally ordered functional heads in their underlying representation and that the resulting word order is the result of ‘partial N(P) movement’ to use Cinque’s (2000) term.

The problem with all these previous analyses, at least with regard to the Arabic DP, is that they deal with these structures as a simple or ordinary DP and they ignore the fact that the so-called ‘mixed order cases’ actually show all the typical properties of a CS construction and that the noun belongs to an embedded DP that functions as the annex of a CS construction. Moreover, the pre and post nominal modifiers show different properties in terms of case and agreement which indicates that they don’t have the same syntactic status as the post nominal modifiers. In other words, ‘mixed order cases’ represent examples of a complex DP structure where the pre nominal modifiers function as (multiple) **heads** of a CS construction (the matrix DP) and the noun and the post nominal modifiers (the embedded DP) function as the **annex** of the CS construction. The next section presents the proposed analysis for these structures and the arguments that support such analysis.

Before we present the proposed analysis in this paper, let's clarify to the reader what we mean by a Construct State (CS) Construction and how it is different from the so-called ordinary DP in Arabic.

The Construct State Construction in Semitic (or *Haalatu- l-iDaafah*):

Construct State (CS) (or genitive) constructions are head-initial structures comprising a *head* noun and a noun phrase (known also as the *annex*).

Mohammad (1988: 241) defines the 'Construct State' as "a construction that roughly corresponds to the genitive NP in English both with possessive 's and the possessive *of*. Ritter (1991: 38) defines it as "a type of noun phrase in which the head noun is immediately followed by a genitive phrase to which it bears some relation, such as possessed-possessor or theme-source". And Siloni (1998: 1) defines it as "a construction which expresses a genitival relation between a head noun and a noun phrase without the mediation of a (dummy) preposition".

To clarify the concept of a CS construction, let's consider the following example:

- 4) daar-u r-radīul-i
 house-Nom the-man-Gen

‘the man’s house’

This example shows a typical CS construction expressing a genitival relation. *daar-u* ‘house-Nom’ is the **head** of the construction and *r-radʔul-i*¹ ‘the man-Gen’ is the complement of the head (also known as the **annex** of the CS construction).² The order of the constituents in the CS construction is always **Head – Annex– Modifier**.

The Difference between a CS DP and an Ordinary DP:

As is clear from (4) above, a CS construction expresses a genitival relation between two nouns in a noun phrase. An ordinary DP in Arabic, however, contains a head noun and other elements (known as modifiers), other than a noun, such as adjectives, cardinals, quantifiers...etc. in an ordinary DP, these modifiers can appear only in the postnominal position and have a different relation with the head noun from that they have if they appear in the prenominal position, as will be clarified below. Moreover, an ordinary DP can never have another noun in it beside the head

¹ The definite article *al-*, or rather the *-l-* part of it, gets completely assimilated to a following [+ coronal, - affricate] consonant. For this reason I ignore the weak vowel *a-* and represent the definite article with just the sound the *-l-* part has assimilated to.

² In Arabic traditional grammar the *head* is referred to as *muDaaf* ‘added’ and the *annex* as *muDaaf ʔilaih* ‘lit. added to it’.

noun. The moment we have another noun in the Arabic DP, the structure had to appear in the CS form. Compare (4) above with (5) below which is an example of an ordinary DP in Arabic:

5) kitaab-u-n dīadiid-u-n

book-Nom-Indef new-Nom-Indef

‘a new book’

Data Analysis:

It is now well-accepted in the literature that Construct State (CS) constructions can be ‘nominal’ or ‘non-nominal’. By a nominal CS construction is meant a structure whose head is a noun (simple or derived) and by a non-nominal CS construction is meant a structure whose head is an element other than a noun (e.g. adjective, quantifier...etc.) (Al-Sameai 2004, Ritter 1991, Siloni 2000b, and Hazout 2000). Siloni (2000b), for example, argues that CS constructions are not limited to nominal heads. A variety of lexical heads can also occur in a genitival relation with a nominal constituent following them: gerunds (Siloni 1997), quantifiers (Ritter 1991), adjectives (Siloni 2000b and Hazout 2000), *beynoni* forms (the Hebrew participle) and even prepositions (Siloni 2000b). Thus, when configured as heads, the so-called non-nominal elements enter into a formal relation directly with their complements. For

example, just like a noun, a quantifier like *kull* ‘all’ may be configured as a head taking a DP as its complement and forming a CS construction with it. Consider the following examples:

6) a. kutub-u T-Tullaab-i

(nominal CS DP)

books-**Nom** the-students-**Gen**

‘the students’ books’

b. kull-u T-Tullaab-i

(non-nominal CS DP)

all-**Nom** the-students-**Gen**

‘ all the students’

The main argument in this paper is that ‘mixed order cases’ are CS DPs. That is, the elements appearing in the prenominal position are actually *heads* forming a CS construction with the noun and its postnominal modifiers. Therefore, in this section, I will show that the so-called ‘mixed order cases’ have exactly the same properties as a CS construction in Arabic. These properties³ are:

The *head* of the CS construction cannot carry the (in)definite article. Consider the following examples:

³ See also Mohammad (1988) and Fassi Fehri (1999) for a discussion of some of these properties.

7) a. kitaab-u T-Taalib-i

(definite DP)

book-Nom the-student-Gen

'the student's book'

b. ***al**-kitaab-u T-Taalib-i

the-book-Nom the-student-Gen

8) a. kitaab-u Taalib-i-n

(indefinite DP)

book-Nom student-Gen-Indef

' a student's book'

b. *kitaab-u-**n** Taalib-i-n

book-Nom-**Indef** student-Gen-Indef

The ill-formedness of (7b) and (8b) is due to the fact that the *head* of the CS carries the (in)definite article.

Similarly, (9) below is ill-formed because *Xamsu* 'five' the *head* of the CS construction carries the indefinite article:

9) * Xams-u-n muHaaDara-at-i-n d□adiid-at-i-n

five-Nom-indef lectures-F-Gen-Indef new-F-Gen-Indef

The *head* of the CS construction is marked by the Case⁴ assigned to the whole DP while the *annex* is always marked with (a non-prepositional) Genitive Case. That is, except for the head, every other element⁵ in the CS construction is invariably assigned the Genitive Case. In the following examples, the *head* of the CS construction carries the Case of the position in which the whole DP occurs:

10) a. $\square a \square d \square aban-i$ [kitaab-**u** T-Taalib-i]
entertained-1.Sg.Acc book-**Nom** the-student-Gen

‘The student’s book entertained me.’

b. $\square ista \square art-u$ [kitaab-**a** T-Taalib-i]
borrowed-1.Sg.Nom book-**Acc** the-student-Gen

‘I borrowed the student’s book.’

c. $katabt-u$ fi [kitaab-**i** T-Taalib-i]
wrote-1.Sg.Nom in book-**Gen** the-student-Gen

‘I wrote in the student’s book.’

Likewise, a cardinal or a quantifier in the pre nominal position carries the Case of the DP which indicates that the pre

⁴ In the examples throughout this paper, I will systematically use the Nominative Case on the head of the CS (and on the NP and other modifiers in the non-CS DP) because it is the citation form in Arabic.

⁵ In a multiple CS construction we have multiple DPs in the same DP structure.

nominal cardinal or quantifier is the *real* head of the nominal structure, not the noun, because the head of a phrase is usually the bearer of the Case that is assigned to the whole phrase. Compare the following example with the examples in (10):

11) HaDart-u Xams-a muHaaDara-at-i-n dǰadiid-at-i-n
attended-I five-**Acc** lectures-F-**Gen**-Indef new-F-**Gen**-Indef
‘I attended five new lectures.’

In (11), the cardinal *Xams* ‘five’ bears the Accusative Case which is the Case of the whole DP as it occurs in the object position, while the noun is in the Genitive Case. This shows that *Xams* is the *real* head of the structure and that the noun is just the complement to this head in a CS construction. Moreover, like in the case of a multiple CS construction, if there is more than one prenominal modifier in a ‘mixed order’ structure, all the other elements in the DP, except the head, (which is the first element in the series of prenominal modifiers) will invariably carry the Genitive Case. Consider the following example:

12) HaDart-u kull-a ǰawal-i Xams-i muHaaDara-at-i-n
dǰadiid-at-i-n
attended-I all-**Acc** first-**Gen** five-**Gen** lectures-F-**Gen**
the-new-F-**Gen**

fi kull-i muqarrar-l-n
in every-Gen course-Gen-Indef

'I attended all five new lectures in every course.'

Furthermore, like in the case of nominal CS constructions, no other modifier can appear between the head and the complement. Compare (13a) with (13b):

13) a. * kull-u al-**ʔa^hkyaa^h**-i T-Tulaab-i (non-nominal CS DP)

all-Nom the-intelligent-Gen the-students-Gen

b. * kitaab-u al-**qadiim**-i T-Taalib-i

(nominal CS DP)

book-Nom the-old-Gen the-student-Gen

The so-called modifiers, like nominals, can also appear in a multiple CS construction with each other. Compare (14a) which shows three non-nominals appearing together as multiple heads of a CS construction and (14b), which shows four nominal appearing together as multiple heads of a CS construction:

14) a. [_{DP4} kull-u [_{DP2} Xams-i [_{DP1} muHaaDaraat-i-n d^hadiid-at-i-n]]]

every-Nom five-Gen lectures-Gen-Indef

new-F-Gen-Indef

‘every five new lectures’

b. [kitaab-u [Taalib-i madrasat-i **al-qaryat-i**]]

book-Nom student-Gen school-Gen **the-village-Gen**

‘the book of the student of the school of the village’

Thus, the so-called pre nominal elements in the Arabic DP show all the characteristics of a *head* of a simple CS (or genitive) structure as I have just shown.

Thus, a non-nominal element in Arabic like adjective, quantifier, cardinal or ordinal can *head* a CS construction when it appears in the prenominal position. Moreover, the noun and its post modifier show all the typical properties of an annex of a CS construction. This proves beyond any doubt that in the so-called ‘mixed order cases’ we are dealing with CS DPs where the so-called pre nominal modifier(s) is/are the head of the CS and the noun and what appears after it is the annex of this CS construction.

I still have to explain how the noun ends up before the adjective in (12a) despite the conviction today that all the modifiers in a DP are base-generated in the prenominal domain (cf. Cinque 1996, 2000):

As is clear from the structure in (14a), the NP *muHaaDara-at-i-n* ‘lectures-F-Gen-Indef’ is not in its position. It looks like it has

moved around the adjective *dʔadiid-at-i-n* ‘new-F-Gen-Indef’. But this adjective is not part of the prenominal order of the ‘matrix’ DP indicated in (14a) as DP₂, where the quantifier and the cardinal are found as the brackets show. That is, the adjective and the NP belong to the ‘embedded’ DP₁ that is used as the complement to the head *Xamsi* ‘five-Gen’ to form a CS construction. Thus, the NP has moved around the adjective but within the structure [_{DP1} A-NP] (see (15) below). When the numeral *Xamsi* ‘five-Gen’ is configured as a head, as is the case here, it takes DP₁ [*muHaaDara-at-i-n dʔadiid-at-i-n*] ‘new lectures’ as its complement and forms a CS construction with it as is clear from the Genitive Case on the noun and its modifying adjective. The Q, in its turn, takes the DP₂ [Num-DP] as its complement to form another CS construction-- an example of multiple CS construction, as is clear from the Genitive Case on the numeral.

Furthermore, the *full* agreement between the adjective *dʔadiid-at-i-n* ‘new-F-Gen-Indef’ and the NP *muHaaDara-at-i-n* ‘lectures-F-Gen-Indef’ shows that the two elements belong to the same structure. The so-called pre nominal modifiers do not show this agreement because they are *heads*, not modifiers. In other words, the so-called modifiers in the Arabic DP have different

As is clear from the structure in (13b), the NP *MuHaaDar-a-at-i-n* ‘lectures-PI-F-Gen-Indef’ has moved around the adjective *dʔadiid-a-at-i-n* ‘new-PI-F-Gen-Indef’ but within DP₁ to the [Spec, DP₁]. Post nominal modifiers show full agreement⁶ with the noun that appears to their left. This DP₁ is then selected by *Xams* ‘five’ as its complement to form a CS construction with it. In DP₂, CardP moves to the [Spec, DP₂] pied piping DP₁ along with it. Had the derivation stopped here we would have ended up with a DP with the cardinal appearing to the left of the noun and the adjective to the right of the noun, one of the possible mixed order cases. It is also clear from the structure that the cardinal and the adjective did not start from the same underlying pre nominal position: the post nominal adjective started as a *specifier* in the pre nominal domain of the embedded DP₁ whereas the cardinal started as a *head* in DP₂. If another element like *kull-u* ‘all-Nom’, as in the example above, is also merged as a *head* then this head takes the structure [*Xamsi MuHaDaraatin dʔadiidaatin*] ‘Lit. five lectures new’ as its complement to form another CS construction. Again, *kull-u* started as a *head*, not as a specifier and it belongs to DP₃, not to DP₁ or DP₂, where the adjective and the cardinal are respectively found. Had *kull-u* been configured as a specifier, it would

⁶ For a detailed account of the possible mechanism responsible for this full agreement on the post nominal modifier(s) in the Arabic DP, see Al-Sameai (2004).

have appeared in full agreement with the noun and in the post nominal position. QP then moves to the [Spec, DP₃] to satisfy the EPP feature of D₃ pied piping everything under it.⁷

Conclusion:

In this paper I have shown that ‘mixed order cases’ in the Arabic DP, and the Semitic DP in general, are an instance of a CS DP where the so-called pre nominal modifiers function as heads of the construction and the noun and the post nominal modifiers function as the annex of the construction. Contrary to what has been proposed earlier by linguists like Fassi Fehri (1999), Cinque (1996, 2000, 2003), and Shlonsky (2000), I argued that the ‘mixed order cases’ are not simply an ordinary DP where the N(P) has moved around some of the modifiers. The properties that these structures exhibit prove beyond any doubt that they are CS DPs. After all, the noun does not carry the Case of the whole DP, but the Genitive Case. Had the noun been the head, as it always is in ordinary Arabic DPs, it would have carried the Case of the whole DP, i.e., the Case that is assigned to the whole DP by the relevant

⁷ For detailed and comprehensive arguments for the motivation for this movement and the driving force behind it, see Al-Sameai (2004).

(functional) head when this DP functions as a constituent at the sentential level. Agreement facts also tell us that the pre and post nominal modifiers in the so-called 'mixed order cases' do not belong to the same DP. Post nominal modifiers show full agreement with the noun while pre nominal modifiers do not show any agreement with the noun. This is because pre nominal modifiers are *heads* in the matrix DP while post nominal modifiers are specifiers in the embedded DP.

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