The syntax of adjectival genitive constructions in Standard Arabic

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Abstract

This paper explores the syntactic derivation of the so-called adjectival genitive constructions in Standard Arabic. Adjectival genitive constructions are formed by an adjective followed by a DP being associated with genitive case by the adjective itself as in *qawijju lqalbi* 'lit. strong the heart' that idiomatically means 'a brave man'. In this research, we show that the adjective does not agree with the following DP but with a hidden element (i.e., *pro*) whose Φ-content controls that of the adjective. We propose that the adjective as well as the following DP enter the derivation as an adjunct to NP whose head is filled with the pro. We propose that the adjective head-moves to adjoin the head D^0 that c-commands the whole construction. Movement of the adjective to the head D^0 is assumed to operate at PF, following Chomsky's (2001) claim that head movement is a PF-related operation that never applies in narrow syntax. This state of affairs provides us with a sound account to the fact that the adjective is assigned a structural case which is variant, based on the function of the adjectival genitive construction in the host sentence (i.e., a subject, an object, an object of preposition, etc.).

Keywords: Adjectival genitive constructions; head movement; construct state nominals; PF; Arabic

1. Introduction

Standard Arabic, similar to other Semitic languages, subsumes a number of genitive constructions unattested in other languages (see Fassi Fehri 1999; Benmamoun 2000, Bardeas 2009, etc.). One unique construction is the so-called adjectival genitive construction, where the whole construction is composed of a clause initial adjective that is assigned structural case, as presented in the data in (1).

(1) a. ʃa:hadtu   tˤawi:l-a   l-lisa:n-i

   saw   long-ACC   DEF-tongue-GEN

   'I saw the long tongue.'

   Intended: 'I saw the man who is talkative.'

   b. marartu   bi-tˤawi:l-i   l-lisa:n-i

      passed   with-long-GEN   DEF-tongue-GEN

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'I passed with the long tongue'.

Intended: 'I passed with the man who is talkative.'

c. ðahaba   tˤawi:l-u   l-lisa:n-i

went   long-ACC   DEF-tongue-GEN

'The long tongue went away.'

'The man who is talkative went away.'

For instance, the adjectival genitive construction *tˤawi:la l-lisa:ni* functions as the object of the sentence in (1a). The adjective *tˤawi:la* is assigned the Accusative case, which is normally assigned to the nominals that function as an object in Standard Arabic. However, the adjective can be assigned other structural cases, depending crucially on its structural position in its host utterance. This is obvious in (1b) and (1c) where the adjective is assigned genitive case and nominative case, respectively. Note here that the second conjunct of the adjectival genitive construction, i.e., *l-lisa:ni* 'the tongue' is assigned the genitive case, which is invariant, regardless of the position of the whole construction. This research is set to account for this fact in addition to providing a syntactic exploration of the derivation of these constructions which have not received due attention in the related literature.

One main property of these constructions is their metaphorical interpretations. For instance, the propositional content of adjectival genitive construction *tˤawi:la l-lisa:ni* does not mean that the man with a long tongue but the man who is talkative or who interferes with others' business. Another interpretation of propositional content of this adjectival genitive construction is that the man under discussion speaks of topics which are sensitive and that should not be handled by him. Further, in all scenarios, the construction predicates about a man or a woman (or even a set of people). However, the exact interpretation of the constructions depends mainly on the context. In structure, this is translated as the exact identity being of the referent that can be defined in terms of the morphological form of the adjective which is inflectable in such situations.

The paper is organized as follows. In section 2, we provide a general discussion of the so-called construct state nominals in Arabic. This construction is similar to the adjectival genitive constructions in several respects, including genitive case assignment of the associate DP, the first element bearing structural case, and the strong adjacency between the two conjunct of the genitive construction. We point to the main points that received much attention in this regard. This discussion is important because we build our syntactic account of the adjectival genitive constructions based on it. Section 3 sets the main problem of the current work, whereas section 4 provides a syntactic account of the adjectival genitive constructions. The bottom line here is that what moves to the head D^0 position of the whole construction is not the noun (or the pro) but the adjective itself. Section 5 is the conclusion.

1.1   *Literature review on construct state nominals in Arabic*

In Standard Arabic (SA), genitive relations are normally expressed through the so-called construct state nominals (CSN) which include two nominals that are juxtaposed next to each other. This is clearly shown in the following examples:[2]

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[2] The first conjunct of the construct state nominal is assigned with a structural case that can be varied depending on the syntactic position of the construct within its sentence (e.g., a subject, an object, an object of preposition, etc.). By contrast, the second conjunct of the construct state nominal is always assigned with genitive case,

(2) a. qalam-u   l-radʒul-i

    pen-NOM   DEF-man-GEN

    'The man's pen'

   b. baːsˤ-u   l-madrasah

    bus-NOM   DEF-school

    'The school bus'

   c. bajt-u   sˤ-sˤajjaːd

    house-NOM   DEF-hunter

    'The hunter's house'

   d. ʃaːriʕ-u   l-baladjah

    street-NOM   DEF-municipality

    'The municipality street'

Note that the first conjunct of the CSN cannot be definite (i.e., suffixed with the definite article *l-* 'the') as shown in the examples in (3):

(3) a. *l-qalam-u   l-radʒul-i

    DEF-pen-NOM   DEF-man-GEN

    Intended: 'The man's pen'

   b. *l-baːs-u   l-madrasah

    DEF-bus-NOM   DEF-school

    Intended: 'The school bus'

   c. *l-bajt-u   sˤ-sˤajjaːd

    DEF-house-NOM   DEF-hunter

Intended: 'The hunter's house'

Additionally, the definiteness status of the second conjunct cannot improve the ungrammaticality of the expression as long as the first conjunct is definite, as clearly shown in the examples in (4).

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irrespective of the syntactic position of the construct state nominal in its host utterance (Bardess 2009; Shlonsky 2012).

(4) a. *l-qalam-u   radʒul-i

   DEF-pen-NOM   man-GEN

   Intended: 'The man's pen'

   d.   *l-ba:s-u   madrasah

      DEF-bus-NOM   school

      Intended: 'The school bus'

   e.   *l-bajt-u   sˤajja:d

      DEF-house-NOM   hunter

      Intended: 'The hunter's house'

By contrast, the second conjunct of the CSN can be indefinite, in which case the whole construct is interpreted as an indefinite entity, as shown in the following examples.

(5) a. qalam-u   radʒul-i

   pen-NOM   man-GEN

   'A man's pen'

   b.   ba:s-u   madrasah

      bus-NOM   school

      'A school bus'

   c.   bajt-u   sˤajja:d

      house-NOM   hunter

      'A hunter's house'

   d.   ʃa:riʕ-u   baladjah

      street-NOM   municipality

 'A municipality street'

The definiteness status of the whole construct is clearly determined through the definiteness specification of the second conjunct of the CSN (which is named as the associate DP, henceforth). If the associate DP is definite, the whole construct is conceived and interpreted as a definite element (see Borer 1999; Sichel 2002, Shlonsky 2004; Danon 2008). On the other hand, when the associate DP is indefinite, the whole construct is interpreted as an indefinite entity. This definiteness association between the definiteness status of the associate DP and that of the whole construct has been a widely investigated and discussed in the related literature (see Bardeas 2009). For instance, Borer (1999) argues that the first member of the construct state enters the derivation without being assigned any

definiteness value. Borer argues that the first conjunct of the construct state acquires the definiteness specification through the derivation via the percolation of the definiteness feature of the second conjunct of the construct (the associate DP) to it. This has the direct effect to account for why the first conjunct of the construct state and the associate DP bear the same definiteness status/interpretation. On the other hand, Benmamoun (2000) argues that the first conjunct can be definite; however, the definiteness article is dropped through some morphosyntactic relation (which he calls *morphological merge*). In other words, Benmamoun proposes that the first conjunct of the construct state nominal can be assigned a unique value of definiteness. However, the realization of this value is subject to a morphosyntactic condition that the specification of definiteness on the first member be dropped at the morphological component of the sentence derivation (see Benmamoun & Lorimor 2006, along these lines).

Recent related literature discusses other aspects of the CSN. For instance, Jarrah et al. (2020) mention that in some Arabic dialects, such as Jordanian Arabic, the first conjunct of the construct state nominal can agree with the second conjunct when the latter is referential as shown in the following examples:

(6) . galam   ʔil-binit

      pen   DEF-girl

    'The girl's pen'

  b. galam-ha$_i$ ʔil-binit$_i$

      pen-her   DEF-girl

    'The girl's pen'

  c. ʕjoon   ʔumm-i

     eyes   mother-my

    'My mother's eyes'

  d. ʕjoon-ha$_i$ ʔumm$_i$-i

    eyes-her   mother-my

    'My mother's eyes'

In (6b), the first conjunct of the construct state nominal agrees in Φ-features (Number, Person, and Gender) with the associate DP. The clitic *-ha* that is suffixed to the head noun *galam* agrees in Number, Gender and Person of the associate DP. The same observation can be held with respect to the sentence in (6d). However, this pattern does not apply across the board. In other construct state nominals, this observation is not obtained, and any agreement between the two members of the construct state nominal causes sentence ungrammaticality. This is shown in the following examples:

(7) barbiiʃ   ʔil-ʁaaz

    pipe   DEF-gas

    'Gas pipe'

b. *barbiiʃ-uh_i   ʔil-ʁaazi

   pipe-SG.M   DEF-gas

     Intended: 'Gas pipe'

c. ʔustaað   ʔil-ʕuloom

   teacher   DEF-sciences

 ' A science teacher'

d. *ʔustaað-hin_i/ha_i   ʔil-ʕuloomi

   teacher-PL.F/MS.F   DEF-sciences

     Intended: 'A science teacher'

Jarrah et al. (2020) argue that the first conjunct of the construct state nominal bears a set of Φ-features; however this set is unvalued (not morphologically specified); hence it needs to be valued properly before the derivation is shipped to the interface conditions (see Chomsky 1995, 2000, 2001; see also Jarrah 2019a,b and Jarrah & Abusalim 2021, for more evidence on the need to value unvalued features in Arabic). According to Jarrah et al. (2020), the set borne by the first member of the construct state nominal is valued by the associate DP, something that ends up with the clitic that appears on the first conjunct morphologically copies the Φ-content of the associate DP. On the other hand, in constructions whereby agreement between the two conjuncts of the construct state nominal is prohibited, the associate DP is not referential, and hence it has no person feature.[3] This ascertains that the second conjunct of the CSNs is not Φ-complete and following Chomsky (2000, 2001) it cannot value the set of Φ-features on the first member. The fact that internal agreement between the conjunctsof the construct state nominal or lack thereof is interpreted as empirical evidence that CSNs are not a homogeneous group in Arabic but split into two different types whose manifestations can be decided, among other things, on the basis on the agreeability of the first conjunct with the associate DP (see Borer 2009 in this regard).

Other research discusses the fact that no element can intervene between the two members of the construct state nominals (Borer 1999), while others shed light on the fact that the nominal modifiers that describe the first member should appear to the left of the second member, as shown in the following examples (see Fassi Fehri 1999):

(8) qalam-u   l-radʒul-i   l-ʔazraq

    pen-NOM   DEF-man-GEN   DEF-blue

    'The man's blue pen'

b.   ba:s-u   l-madrasah   l-ʔabjadˤ

    bus-NOM   DEF-school   DEF-white

    'The white school bus'

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[3] Jarrah et al. (2020) follow Henderson's (2013) assumption that person feature is responsible for referentiality. In other words, words that have no Person feature are not referential and hence Φ-incomplete and therefore unable to value an unvalued set of complete Φ-features borne by other DPs (see Chomsky 2000, 2001).

c. bajt-u   sˤ-sˤajja:d   l-wa:siʕ

house-NOM   DEF-hunter   DEF-wide

'The hunter's wide house'

d. ʃa:riʕ-u   l-baladjah   l-wa:siʕ

street-NOM   DEF-municipality   DEF-wide

'The wide municipality street'

This fact has attracted much attention from many researchers. Two competing proposals have been put forth to provide an account for this observation. The first approach is known as the head movement approach. Under this approach, the head noun head-moves to the higher D^0 while the possessor emerges as a complement of this head noun (see Fassi Fehri 1999; Sichel 2002). The merger of the possessor as a complement is important so as to account for the genitive case assignment. Under this view, then, nominal modifiers are right adjoined, hence the word order is maintained (where the head noun precedes the associate DP) and nothing can intervene between them.[4] This can be clearly shown in the following schematic structure:
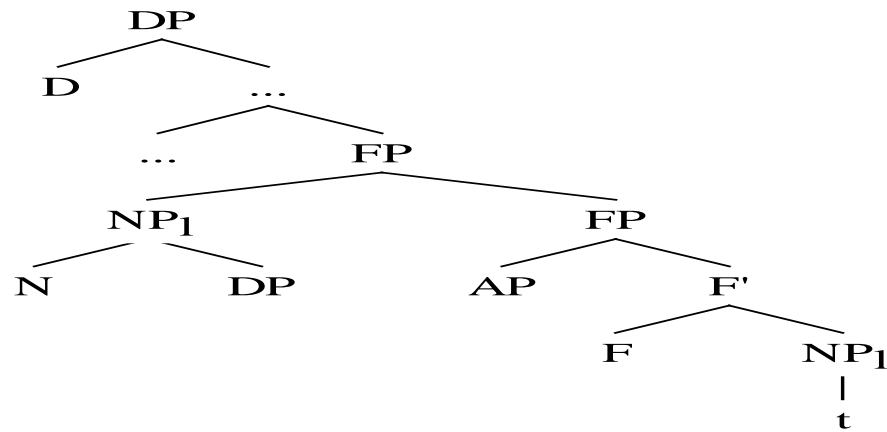
(9)
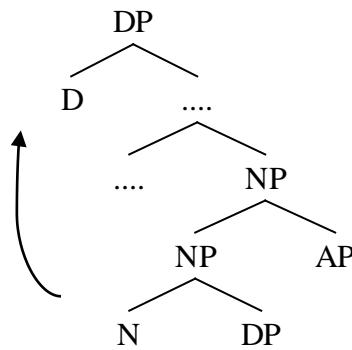
On the other hand, other researchers argue that there is no N^0-to-D^0 movement in Arabic construct state nominals. For these researchers (cf. Shlonsky 2004), N^0+DP moves as one unit to the Specifier position of a dedicated functional phrases which house the AP in their specifiers, pied piping all of the material to their right. This approach is called snowballing. According to the proponents of this approach, this approach is superior to the head movement approach because it accounts for scope facts inside the DP (see Cinque 2005, 2010). Additionally, this approach is amenable to approaches where genitive case assignment creates a very local domain that cannot be broken up (see Shlonsky 2004). This can be schematically represented as follows.

(10)

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[4] Movement of the head noun to adjoin to D^0 can be supported by the fact that the first conjunct is disallowed to appear with the definite article or with the so-called the nunation suffix. The logic here is as follows. Because the D^0 position is filled by the head noun, D^0 cannot be realized through a different strategy such as the definiteness/nunation article (see Jarrah and Zibin 2016 for further discussion along these lines).

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                           DP
                      ┌─────┴─────┐
                      D          ...
                            ┌─────┴─────┐
                           ...          FP
                      ┌─────┴─────┐  ┌───┴────┐
                     NP₁            FP
                  ┌───┴───┐    ┌─────┴─────┐
                  N       DP   AP          F'
                                      ┌─────┴─────┐
                                      F          NP₁
                                                  |
                                                  t
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Additionally, related literature shows that construct state nominals are strong islands in Arabic in the sense that nothing can be extracted out of them (see Mohammad 1999; Soltan 2007, Jarrah 2017a,b and 2019c).

After this short overview on the most intriguing issues that have attracted attention from researchers, we discuss the main problem of the current work that aims to resolve it, which is the syntax of adjectival genitive constructions.

2. The problem of the study

One important yet under-investigated aspect of construct state structures in Standard Arabic pertains to the use of the so-called adjectival genitive constructions whereby the head noun is replaced by the adjective as shown in the following examples:

(11) a. qawijj-u   l-qalb-i

   strong-NOM   DEF-heart-GEN

    'Strong heart'

    Intended: 'A brave (man)'

 b. tˤawi:l-u   l-lisa:n-i

    tall-NOM   DEF-tongue-GEN

    'Tall tongue'

    Intended: 'A talkative (man)'

 c. sˤa:f-u   ð-ðihn-i

    clear-NOM   DEF-mind-GEN

    'Clear mind'

    Intended: 'A sober (man)'

In the constructions in (12), the construct starts with an adjective followed by a DP that is assigned with the genitive case. If the genitive case is changed to nominative or accusative case, the resulting construction would be ungrammatical, as shown in the following examples:

(12) a. *qawijj-u   l-qalb-u/a

   strong-NOM   DEF-heart-NOM/ACC

   'Strong heart'

   Intended: 'A brave (man)'

 b. *tˤawi:l-u   l-lisa:n-u/a

   tall-NOM   DEF-tongue- NOM/ACC

   'Tall tongue'

   Intended: 'A talkative (man)'

 c. *sˤa:f-u   ð-ðihn-u/a

   clear-NOM   DEF-mind-NOM/ACC

   'Clear mind'

   Intended: 'A sober (man)'

Additionally, the DP cannot appear to the left of the adjective; otherwise, the construction would become ungrammatical, as shown in the following examples:

(13) a. *l-qalb-i   qawijj-u

   DEF-heart-GEN   strong-NOM

   'Strong heart'

   Intended: 'A brave (man)'

 b. *l-lisa:n-i   tˤawi:l-u

   DEF-tongue-GEN   tall-NOM

   'Tall tongue'

   Intended: 'A talkative (man)'

 c. *ð-ðihn-i   sˤa:f-u

   DEF-mind-GEN   clear-NOM

   'Clear mind'

   Intended: 'A sober (man)'

Note here that the Φ-content of the adjective can be variant, depending crucially on the identity of the intended person(s) that the construction modifies. For instance, all adjectives in (12) can appear with a [3SG.F] form, in which case the interpretation is that the whole construct modifies a female entity who is [3SG]. This is clearly shown in the following examples:

(14) a. qawijj-t-u   l-qalb-i

strong-F-NOM   DEF-heart-GEN

'Strong heart'

Intended: 'A brave (woman)'

b. tˤawi:l-t-u   l-lisa:n-i

tall-F-NOM   DEF-tongue-GEN

'Tall tongue'

Intended: 'A talkative (woman)'

c. sˤa:f-t-u   ð-ðihn-i

clear-F-NOM   DEF-mind-GEN

'Clear mind'

Intended: 'A sober (woman)'

In this research, I will provide a syntactic account of the derivation of this type of construct state.

3. The analysis (the results)

Any syntactic account of adjectival genitive constructions should be taken into consideration the properties we have just mentioned in the previous section. For us, the most important aspect of adjectival genitive constructions pertains to the fact that the adjective agrees in Φ-features with a hidden noun that specifies the value of the features of the adjective. According to the related literature, adjectives bear a set of Φ-features which are unvalued and uninterpretable (see Danon 2008, 2011, Shlonsky 2012). According to Chomsky's (1995) Principle of Full Interpretation, any uninterpretable features must be eliminated from the derivation before that letter is sent to the interface levels. That is because uninterpretable features do not contribute to the meanings of the host expressions and therefore should not be part of its propositional content. Accordingly, we propose that the head adjective that starts the construct bears a set of Φ-features which should be lexically valued and eliminated from the derivation. Given the fact that the valuation of this content is variant in the sense that it can bear a different specification (depending crucially on the context), let us suppose that the adjective enters into an Agree relation (Chomsky 2000, 2001) with a pro that bears a set of valued Φ-features. However, the question that arises here is related to the position of this pro in the syntactic derivation of the relevant DP. Given the fact that the adjective as well as the associate DP attributes some property to the hidden pro, I propose that the complex A+DP enters as an adjunct to the projection headed by the pro itself in the following manner:

(15)
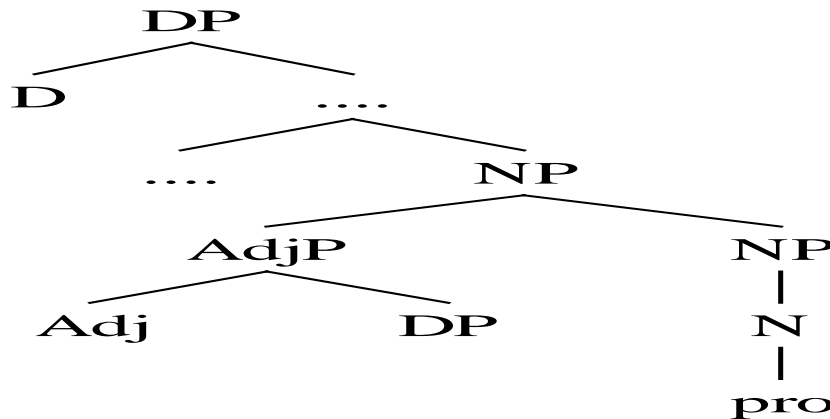
Our analysis that the AdjP enters the derivation as an adjunct is consistent with the literature that modifiers inside DPs are adjuncts (see Pereltsvaig 2006). However, even under snow-balling proposals (Shlonsky 2004, Cinque 2005, 2010), Adjective Phrase enters the derivation as a specifier of Functional phrases which are not integral parts of the DP, as they can be absent unless there is some morphological evidence to the contrary (for example, there is an adjective).

Furthermore, the tree in (16) shows that the DP associate enters the derivation as a complement of Adj. This allows us to account for the genitive case that appears on the DP associate. As we mentioned earlier, the associate DP is always assigned with genitive case, irrespective of the syntactic environment where it takes place. This is shown in the following sentences:

(16). ʃa:hadtu   tˤawi:l-a   l-lisa:n-i

      saw   long-ACC   DEF-tongue-GEN

'I saw the long tongue.'

Intended: 'I saw the man who is talkative.'

b. marartu   b-tˤawi:l-i   l-lisa:n-i

   passed   with-long-GEN   DEF-tongue-GEN

'I passed with the long tongue'.

Intended: 'I passed with the man who is talkative.'

c. ðahaba   tˤawi:l-u   l-lisa:n-i

   went   long-ACC   DEF-tongue-GEN

'The long tongue went away.'

'The man who has is talkative went away.

The examples in (17) make it clear that the associate DP in adjectival genitive constructions is always assigned with the genitive case. This can be syntactically interpreted as the two enter into an Agree relation (the adjective and the associate DP). This Agree relation results in genitive Case assignment becuase the goal is the complement of the head probe. According to Shlonsky (2004), the

genitive case assignment requires a very local domain that can be obtained in head-complement configurations.

The question that arises here is why the Φ-content of the adjective is not valued by the associated DP. As we have shown above, the morphological form of the adjective is not fixed, but it can be assigned with different values, depending on the Φ-content of the pro. The relevant examples are reproduced in the following:

(17)a. qawijj-t-u   l-qalb-i

   strong-F-NOM   DEF-heart-GEN

   'Strong heart'

   Intended: 'A brave (woman)'

 b. tˤawi:l-t-u   l-lisa:n-i

   tall-F-NOM   DEF-tongue-GEN

   'Tall tongue'

   Intended: 'A talkative (woman)'

 c. sˤa:f-t-u   l-ðihn-i

   clear-F-NOM   DEF-mind-GEN

   'Clear mind'

   Intended: 'A sober (woman)'

The prediction here is that the adjective head agrees with the associate DP, contrary to fact. In order to account for this, we propose that elements that are assigned with genitive case do not share their Φ-content with any head even if this head is the element that assigns them the genitive case. According to the related literature (Shlonsky 2004), genitive case is assigned in a very local domain. Shlonsky (2004) shows that in nominal construct state nominals, the genitive case which is borne by the associate DP is assigned by the head noun. In this research, we propose that the genitive case is assigned by an adjective to the associate DP. This can be interpreted that the genitive case is assigned within a very local domain (a head-complement configuration) irrespective of the lexical type of the head. In other words, the genitive case is a result of locality rather than the presence of a specific type of heads. Therefore, the type of the head is not an important factor in genitive case assignment, but its presence is. This is why the element that is assigned Genitive case does not share its Φ-content with the head that assigns it with the genitive cases.

Following this line of analysis, the unvalued Φ-content on the adjective is left without specification and hence the adjective should look for another goal that can value its Φ-content. This goal should have a complete list of Φ-features which are valued and specified. We propose that the pro is the element that values the Φ-content of the adjective. This should not be surprising. Firstly, Holmberg (2006) mentions that the pro is a normal pronoun that has a set of Φ-features. However, the main feature that distinguishes it from other pronouns lies in its phonological defectiveness in the sense it has no phonological content.

Additionally, the AdjP whose head is the Adj c-commands the pro that is part of its c-command complement. The fact that the adjective which functions here as a probe and the pro which functions here as a goal conforms to Chomsky's conditions of the Agree operation to take place. According to Chomsky (2000, 2001), the probe should c-command the goal in order for Agree to take place. Accordingly, we propose that the adjective Φ-Agrees with the pro whose Φ-content is able to value the Φ-features of the adjective. This directly accounts for why the adjective can be assigned with a different morphological form that indicates the presence of a pro in the syntactic derivation of the relevant constructions.

The question that arises now concerns the element that fills the D^0 position in the syntax. According to the main work on the derivation of construct state nominals in Semitic in general and Arabic in specific, the head noun is what moves to the DP position in the syntax. This has the direct effect that the head noun is construct state nominal cannot be suffixed with the definite article nor the nunation suffix which relevant literature indicates that they occupy the head D^0 position (see Jarrah and Zibin 2016). One might assume here that the pro is the element that moves to D^0 in such situations. The pro is a head and hence can move to adjoin to another head in the tree. Pursuing this line of analysis, the relevant derivation of the adjectival construct state can be schematically represented as follows:

(18)
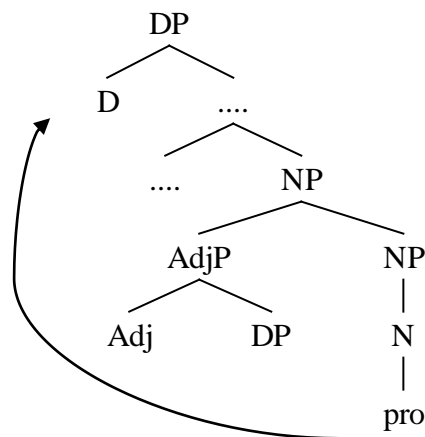
However, there are a number of reasons that encourage us to reject this analysis. Firstly, Jarrah and Zibin (2016) mention that in Najdi Arabic the head D^0 position should be filled with an element that has a phonetic realization. If there is no element that fills this position, the nunation suffix is used instead. In other words, the nunation suffix is used as a PF strategy to realize the head D^0 position in the derivation. This ascertains that the head D^0 position should be filled with an element that has a phonological content, otherwise the derivation crashes. Therefore, the movement of the pro to the head D^0 position is valueless here because the head D^0 position is not phonologically filled with an overt element.

Another reason that makes us think that the pro is not the element that moves to the head D^0 position, but the adjective does so comes from the ubiquitous fact that the structural case appears on the adjective. The examples in (17) above (reproduced here for convenience) show that the structural case appears on the adjective.

(19)a. ʃa:hadtu　　　　tˤawi:l-a　　　　　　l-lisa:n-i

　　　saw　　　　　　long-ACC　　　　　DEF-tongue-GEN

'I saw the long tongue.'

Intended: 'I saw the man who is talkative.'

b. marartu   b-tˤawi:l-i   l-lisa:n-i

   passed   with-long-GEN   DEF-tongue-GEN

   'I passed with the long tongue'.

Intended: 'I passed with the man who is talkative.'

c. ðahaba   tˤawi:l-u   l-lisa:n-i

   went   long-ACC   DEF-tongue-GEN

   'The long tongue went away.'

   'The man who has a long tongue went away.'

In (20a) the adjective is assigned with the Accusative case, whereas the adjective is assigned with the genitive case in (20b). In (20c) the adjective is assigned with the nominative case. The fact that the adjective is assigned with a structural case that complies with the functional position of the relevant adjectival genitive construction is hard evidence that the adjective is located under D^0 which is by theory the element that is assigned with the structural case from outside. This indicates that the derivation of the adjectival genitive constructions is conducted in the fashion shown in the following tree:

(20)
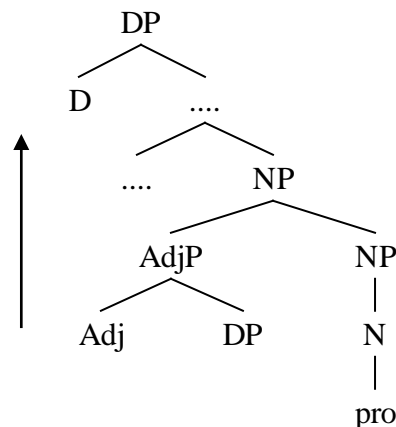
However, one problem arising here concerns movement of the adjective to the head D^0 position. According to the related literature, any element that is part of a specifier cannot be extracted (see Huang 1982, especially his discussion of the so-called condition of extraction domains). However, this problem dissolves if we embrace the argument that head movement in Arabic takes place at PF. This is explained by the argument proposed by Rayyan et al. (2020) which submits that head movement in Arabic occurs at the PF-component of the sentence. In the spirit of it, Rayyan et al's (2020) argument confirms Chomsky's (2001) original assumption that head movement should be demoted to the PF-component of the sentence (see also Platzack 2013 for another argument that head movement is part of the post-spell-out operations).

5. Conclusion

In this article, we have offered a syntactic account of the so-called adjectival genitive constructions in Standard Arabic. As we have shown, these constructions are derived by placing an adjective construct-initial, followed by a DP that has been shown to be always assigned genitive case assigned by the adjective itself. One important finding of this research is that the head adjective doesn't agree with the following, associate DP but with a hidden element (i.e., *pro*) whose Φ-content is assumed to control that of the adjective. We have proposed that the adjective and its associate DP complement enters the derivation as an adjunct to NP headed by the assumed pro. We have also assumed that the adjective moves to adjoin to the head D^0 in order to realize it at the PF interface. Movement of the adjective to the head D^0 is assumed to operate in the PF. This has accounted for the fact that the adjective is assigned the structural case which has no fixed value but can have a different value depending mainly on the function of the adjectival genitive construction in the host sentence.

References

Bardeas, S. M. 2009. *The syntax of the Arabic DP* (Doctoral dissertation, University of York).

Benmamoun, E. 2000. *The feature structure of functional categories: A comparative study of Arabic dialects*. Oxford University Press.

Benmamoun, E., & Lorimor, H. 2006. Featureless expressions: When morphophonological markers are absent. *Linguistic inquiry*, *37*(1), 1-23.

Borer, H. 1999. Deconstructing the construct. In *Beyond principles and parameters* (pp. 43-89). Springer, Dordrecht.

Borer, H. 2009. Afro-Asiatic, Semitic: Hebrew. In Rochelle Lieber & Pavol Štekauer (eds.), The Oxford handbook of compounding, 386-399. Oxford: Oxford University Press.

Chomsky, N. 1995. The Minimalist Program. Cambridge, MA: MIT Press

Chomsky, N. 2000. Minimalist inquiries: The framework. In Roger Martin, David Michaels & Juan Uriagereka (eds.), Step by step: Essays on minimalist syntax in honor of Howard Lasnik, 89–155. Cambridge, MA: MIT Press .

Chomsky, N. 2001. Derivation by Phase. In Michael Kenstowicz (ed.), Ken Hale: A life in language, 1–52. Cambridge, MA: MIT Press.

Cinque, G. 2005. Deriving Greenberg's Universal 20 and its exceptions. *Linguistic inquiry*, *36*(3), 315-332.

Cinque, G. 2010. *The syntax of adjectives: A comparative study* (Vol. 57). MIT press.

Danon, G. 2008. Definiteness spreading in the Hebrew construct state. *Lingua*, *118*(7), 872-906.

Danon, G. 2011. Agreement and DP- internal feature distribution. *Syntax*, *14*(4), 297-317.

Fehri, Fehri, A. 1999. Arabic modifying adjectives and DP structures. *Studia linguistica*, *53*(2), 105-154.

Henderson, B. 2013. Agreement and person in anti-agreement. Natural Language & Linguistic Theory, 31. 453-481.

Huang, C.-T. J. 1982. Logical relations in Chinese and the theory of grammar. Ph.D. dissertation, MIT, Cambridge, Mass

Jarrah, M. A. S. 2017a. *Subject extraction in Jordanian Arabic* (Doctoral dissertation, Newcastle University).

Jarrah, M. 2017b. A criterial freezing approach to subject extraction in Jordanian Arabic. *The Canadian Journal of Linguistics/La revue canadienne de linguistique*, *62*(3), 411-448.

Jarrah, M. 2019a. Record your Agree: A case study of the Arabic complementizer ʔinn. *Journal of Linguistics*, *55*(1), 83-122.

Jarrah, M. 2019b. A cartographic approach to embedded word order in Jordanian Arabic. *Folia Linguistica*, *53*(2), 367-409.

Jarrah, M. 2019c. Factivity and subject extraction in Jordanian Arabic. *Lingua*, *219*, 106-126.

Jarrah, M., & Abusalim, N. 2021. In favour of the low IP area in the Arabic clause structure. *Natural Language & Linguistic Theory*, *39*(1), 123-156.

Jarrah, M., & Zibin, A. 2016. Syntactic investigation of nunation in Haili Arabic. *SKY Journal of Linguistics*, *29*.

Jarrah, M., Altakhaineh, A. R. M., & Al-Rasheedi, E. 2020. ɸ-agreement within Construct State in Jordanian Arabic. *STUF-Language Typology and Universals*, *73*(1), 1-26.

Mohammad, M. A. 1999. Checking and licensing inside DP in Palestinian Arabic. *Amsterdam Studies In The Theory And History Of Linguistic Science Series 4*, 27-44.

Pereltsvaig, A. 2006. Head movement in Hebrew nominals: A reply to Shlonsky. *Lingua*, *116*(8), A1-A40.

Platzack, C. 2013. Head movement as a phonological operation. *Diagnosing syntax*, *46*, 21-43.

Rayyan, M., Jarrah, M., & Abusalim, N. 2020. Narrow-syntax and post-spellout movements: evidence from the syntax of idiomatic expressions in Arabic varieties. *Heliyon*, *6*(4), e03658.

Shlonsky, U. 2004. The form of Semitic noun phrases. *Lingua*, *114*(12), 1465-1526.

Shlonsky, U. 2012. On some properties of nominals in Hebrew and Arabic, the construct state and the mechanisms of AGREE and MOVE. *Rivista di linguistica*, *24*(2), 267-286.

Sichel, I. 2002. Phrasal movement in Hebrew adjectives and possessives. *Dimensions of movement: From features to remnants*, 297-339.

Soltan, U. 2007. *On formal feature licensing in minimalism: Aspects of Standard Arabic morphosyntax* (Doctoral dissertation).

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