

The Arabic Noun Phrase

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Summary: The Arabic noun phrase is either definite or indefinite, depending on whether it is marked with the definite article or not. The definite article is analyzed as the head of a determiner phrase, while different approaches have been taken to its relationship to the head noun. Definite noun phrases can be modified with demonstrative adjectives or with post-modifying adjectives. The construct state genitive construction has been analyzed as having structure that parallels the structure of VSO clauses. The analytical genitive constructions in Modern Standard Arabic and the dialects has been analyzed as having a structure parallel to that of SVO clauses.

1. Simplex Noun Phrases

1.1 Definiteness

Arabic noun phrases consist of a noun stem, or in some cases, an adjective with nominal reference. Noun phrases are either *definite* or *indefinite*, where definiteness is a morphosyntactic rather than semantic category. Simplex noun phrases are definite if marked with the definite article (**ʾal-kitāb-u** 'the book') while indefinite noun phrases are not marked at all (**kitāb-un** 'a book'). In Standard Arabic with full **ʾiʿrāb** ('declension'), nouns with regular (Arabic **muʿrab** 'inflectable') form are marked with one of three cases: the *nominative* (Arabic **marfūʿ** 'raised'), the *accusative* (Arabic **manṣūb** 'lifted'), and the *genitive* (Arabic **majrūr** 'attracted'). The cases are

marked with the suffixes **-u**, **-a**, and **-i** respectively. Singular nouns with irregular (Arabic **mubnī** 'fixed') form are not marked for case. Most morphologically indefinite nouns (including proper names) which end in consonants are marked with a final [n] following the case-vowel (Arabic **tanwīn**, 'addition of [n]').

The definite article has been analyzed as the head of a Determiner Phrase (DP) to which the nominal head raises and incorporates (Mohammad 1988, Fassi-Fehri 1993, Benmamoun 2000):

- (1) a. ʾal-kitāb-u
 the-book-nom
- b. [DP [D ʾal- kitāb-u_i] [NP t_i]]

However, in Modern Standard Arabic and the dialects, numerals can occur prenominal and host the definite article (Borer 1996; Hoyt 2000, 2002; Shlonsky 2004):

- (2) a. **haṭ-talāt** ḥabbāt
 these-three pills
 'these three pills'
 (Palestinian Arabic: Schmidt & Kahle 1918:31.6)
- b. bāʿ **el-ʾarbaʿ** ʾeḥṣne l-mlāḥ
 sell.perf.3Msg the-four horses.pl the-good.pl
 'He sold the four good horses.'
 (Lebanese Arabic: Feghali 1928:190)

In Modern Standard Arabic examples like these have the case-marking of a construct state nominal, but host the definite article:

- (3) (Wright 1898, v.II:264)
- a. ʾal-**ḫams-u** qur-in
 the-five-nom villages-gen
 'the five villages'
- b. ʾ**at-talātat-u** rijāl-in
 the-three-nom men-gen

'the three men'

These examples suggest that attachment of the definite article to the head noun has nothing to do with movement. Accordingly, Hoyt (2002:131) proposes an analysis which places numerals in the specifier of a Number Phrase (Ritter 1991) located between DP and NP:

(4) [DP 'al- [NumP [QP **talātat-u**] [Num' [Num Num **rijāl-in_i**] [NP t_i]]]]

Shlonksy (2003) claims that the head noun raises as a phrase rather than as a head, and that the numeral is the head of an intermediate Quantifier Phrase:

(5) [DP 'al- [QuantP **talātat-u** [FP [NP_i **rijāl-in_i**] [F' F t_i]]]]

According to these approaches, the definite article attaches to the following word in the morphological component of the grammar rather than in the syntax.

1.2 Adjectival Modifiers

Adjectives and other modifiers such as relative clauses and prepositional phrases follow the nouns that they modify:

- (6) a. 'al-kitāb-u **l-kabīr-u**
the-book.Msg-nom the-big.Msg-nom
'the big book'
- b. 'ar-rajul-u lladī yuḥibbu-ha
the-man.Msg-nom rel.Msg love.indic.3Msg-pn3Fsg
'the man who loves her'
- b. madīnat-un **fī maṣr-in**
city.Fsg-nom in Egypt-gen
'a city in Egypt'

Early in the modern tradition treat post-nominal modifiers as right-adjoined to the noun phrase:

(7) [DP 'al- [NP [NP **kitāb-u**] [AP **l-kabīr-u**]]]

More recently proposals assume that post-nominal modifiers are left-adjoined, but that they

appear following the head noun because latter has undergone head-movement to a position higher than the that of the modifier:

(8) [DP [D 'al- kitāb-u_i] [NP [NP [AP l-kabīr-u] t_i]]]

Ordering constraints on post-nominal adjectives have been discussed by Sproat & Shih (1991) and Fassi-Fehri (1998).

1.3 Demonstrative Adjectives

Definite nouns can be modified with demonstrative adjectives. These are compounds of morphemes which express proximity, gender, number, and case (for detailed discussion see Wright 1898, v.I:264-270| Brustad 2000:112-140):

		<i>Standard Arabic</i>	<i>Moroccan</i>	<i>Egyptian</i>	<i>Syrian</i>	<i>Kuweiti</i>
<i>Proximal</i>		hā-				
<i>Distal</i>		-ka, -līka	-k, -kha	-k		-k, -č
<i>Singular</i>	<i>Masc</i>	-ḏā	-ḏī, -ḏū	-ḏā		
	<i>Fem</i>	-ḏī	-ḏī	-ḏī	-ḏī	-ḏī
<i>Dual</i>	<i>Masc</i>	-ḏāni, -ḏayni	n/a			
	<i>Fem</i>	-tāni, -tayni	n/a			
<i>Plural</i>	<i>n/a</i>	ʔūlāʔi, ḏū	-ḏū	-ḏōl, -khum	-ḏōl, -ḏōlīk	-ḏēla

The demonstrative can modify only definite nouns. In general, the demonstratives can either

precede or follow nouns marked with the definite article:

- (9) a. (hāḍa) r-rajul-u (hāḍa)
this.Msg the-man.Msg-nom this.Msg
'this man'
- b. (tilka) l-nisā³-u (tilka)
that.Fsg the-lady.Fsg-nom that.Fsg
'that lady'

In all other cases, demonstratives must follow the noun they modify.

Demonstratives have been treated as heads of DP (Benmamoun 2000), and as heads of the entire NP (Mohammad 1999).

2. Complex Noun Phrases

2.1 The Nominal Construct State

The *construct state* is perhaps the Arabic (and indeed Semitic) syntactic construction *par excellence*. For a detailed overview, see Wright (1898, v.II:198-234). A construct state consists of two nominal expressions grouped together as a constituent. The first expression, referred to here as the *construct head*, but also known as the *possessor*, the *annexee*, or in Arabic the **muḍāf** 'that which is added, annexed', is a morphologically 'bare' noun, lacking any definiteness marking or **tanwīn**. The second expression, here called the *inner NP* and elsewhere the *possessee*, the *annexor*, or Arabic **muḍāf ḍ'ilay-hi**, 'that which is added to, annexed to', is a full noun phrase (which can itself be a construct state) immediately following the construct head and marked in the genitive case. The whole construct 'inherits' the (in)definiteness of the inner-NP:

- (10) a. kitāb-u l-bint-i
name-nom the-girl-gen
'the girl's book'

- b. kitāb-u **bint-in**
name-nom girl-gen
 'a girl's book'

Nouns in the construct head position undergo several phonological changes. Feminine nouns ending in the 'bound-t' (Arabic **tā'** **marbūṭa**) morpheme are pronounced with a final [t] so that, for example, **mara** 'woman' becomes **marat yūsif** 'Yousif's wife'. In Standard Arabic, **tanwīn** and the final [n] of the plural and dual suffixes is deleted when the noun is in the construct head position:

- (11) a. **bint-un** 'a girl', **bint-u ḥamīd** 'Hamid's daughter';
 b. **muslimūna** 'Muslims', **muslimū l-ʿālim-i** 'Muslims of the world', and
 c. **wālidān** 'parents', **wālidā l-ʿarīs-i** 'parents of the bride'.

Strictly speaking, nouns hosting possessive clitic pronouns such as **kitāb-u-ha** 'her book' are in construct as well, given that the same phonological changes take place and that the head noun and the possessive form an inseparable constituent.

Adjectives modifying either the construct head or the inner NP must follow both:

- (12) a. **dār-u l-muʿallim-i l-kabīrat-u**
house.Fsg-nom the-teacher.Msg-gen the-big.Fsg-nom
 'the teacher's big house'
 b. ***dār-u l-kabīrat-u l-muʿallim-i**
house.Fsg-nom the-big.Fsg-nom the-teacher.Msg-gen

Ambiguities can arise if the construct head and inner-NP are of the same gender and number, and case (in fully inflected Standard Arabic):

- (13) a. **fī kitāb-i l-walad-i l-kabīr-i**
in book.Msg-gen the-boy.Msg-gen the-big.Msg-gen
 'in the boy's big book' 'in the big boy's book'

Adjectives modifying the inner-NP are 'nested' inside those modifying the construct head:

- (14) a. dār-u [l-mu‘allim-i **l-kabīr-i**] **l-wāsi‘at-u**
house.Fsg-nom the-teacher.Msg-gen the-big.Msg-gen the-wide.Fsg-nom
 'the big teacher's wide house'
- b. * dār-u l-mu‘allim-i **l-wāsi‘at-u l-kabīr-i**
house.Fsg-nom the-teacher.Msg-gen the-wide.Fsg-nom the-big.Msg-gen

In Standard Arabic, the construct state expresses a wide range of possessive and partitive relationships. These include both material (15a) and inalienable (15b) possession, location (15c), part-whole relationships (15c), measure or quantity (15e), and comparison (15f):

- (15) a. kitāb-u l-walad-i
book-nom the-boy-gen
 'the boy's book'
- b. bint-u l-malik-i
daughter-nom the-king-gen
 'the king's daughter'
- c. šaṭṭ-u l-baḥr-i
shore-nom the-sea-gen
 'the edge of the sea', 'the seashore'
- d. rās-u l-jabal-i
head-nom the-mountain-gen
 'the peak of the mountain'
- e. finjān-u qahwat-in
cup-nom coffee-gen
 'a cup of coffee'
- f. ‘akbar-u l-awlād-i
big.comp.Msg-nom the-boys-gen
 'the biggest of the boys'

In the dialects, the construct state is used with varying productivity and competes with the analytic genitive (see below) for expressing the various genitive relationships (see Harning 1980, Brustad 2000:70-88; Holes 2004:208-210).

Analyses of the construct state in Arabic include Aboudi (1985), Borer (1988, 1996), Mohammad (1991), Hazout (1991, 1994, 1995, 2000), Fassi-Fehri (1993), Siloni (1996a, 1996b, 1997a, 1997b, 2000, 2002), Benmamoun (2000), Shlonsky (2004), and Kremers (2003). The

most influential type of analysis assigns to the construct a structure parallel to the structure of a clause (Aoun 1977; Ayyoub 1985; Mohammad 1988; Fassi-Fehri 1993; Ouhalla 1988, 1994; see also Ritter 1988, 1991, 1993, 1995). Specific analyses of this type differ in theory-specific details but claim that the construct state consists of a Determiner Phrase (DP) with a 'null' head dominating a lexical projection headed by the construct head. The construct head raises to and incorporates with the head of the DP. The inner-NP is inserted as the specifier of the lexical projection (or in some proposals, of an intermediate functional projection) to which genitive case is assigned. The inner-NP and the construct head 'agree' in definiteness under a specifier-head relation in one of these projections:

- (16) a. kitāb-u l-walad-i
 book-nom the-boy-gen
 'the boy's book'
- b. [_{DP} [_D D **kitāb-u**_i] [_{NP} [_{DP} **l-walad-i**] t_i]]

The structure of the construct state therefore directly parallels the structure of an Arabic clause in VS word order. This approach elegantly captures several of the key properties of the construct state, such as the adjacency requirement, definiteness inheritance, and the nesting of modifiers.

Other approaches are taken by Borer (1996), Benmamoun (2000), Siloni (2003) and Shlonsky (2004). Borer, Benmamoun, and Siloni propose that the construct head and inner-NP undergo 'morphological merger', in which the syntactic structure in (17a) undergoes morphological rebracketed as (17b):

- (17) a. [_{DP} **kitāb-u** [_{NP} **l-walad-i**]]
- b. [_{DP} **kitāb-u-l-walad-i**]

Shlonsky (2004) proposes that the construct head is actually a phrasal constituent which has raised to the left of the inner noun, which is in an intermediate specifier position of a richly

articulated functional structure.

- (18) a. [DP D [FP [DP **l-walad-i**] [F' F [NP **kitāb-u**]]]]]
 b. [DP [NP_i **kitāb-u**] [D' D [FP [DP **l-walad-i**] [F' F t_i]]]]]]

2.2 The Verbal Construct

Much work on the construct state focuses on examples in which the construct head is a *verbal noun* (Arabic **maṣḍar** 'source') and the inner-NP its subject or object:

- (19) a. **kitābat-u** l-walad-i la-l-wājib-i
writing.Fsg-nom the-boy-gen to-the-assignment
 'the boy's writing the assignment'
 b. **'iḡfā'-u** l-māl-i 'ala š-šurūṭ-i
hiding-nom the-money-gen from the-police-gen
 'the hiding of the money from the police'

Additional arguments can follow the inner-NP either in the accusative case or marked with a preposition, and are subject to an ordering restriction which parallels the ordering restrictions on arguments in *verbal clauses*->, that the inner-NP must be the least oblique.

Most analyses of the verbal construct argue that the lexical phrase is a verb phrase rather than a noun phrase. The verbal noun is the head of the verb phrase, and it raises and adjoins to the head position of DP, with the inner noun in a VP-internal subject position, and any objects in the complement of VP:

- (20) a. [DP D [VP [DP **l-bint-i**] [V' **taksīr-u** [DP **š-šibbāk-a**]]]]]
 b. [DP [D D **taksīr-u_i**] [VP [DP **l-bint-i**] [V' t_i [DP **š-šibbāk-a**]]]]]]

However, Fassi-Fehri (1993) notes that if the object is marked with the accusative case, the verbal noun can be modified with adverbs (21a), while if it is marked with the preposition l-,

then the verbal noun must be modified with an adjective (21b):

- (21) a. ʔintiḳād-u r-rajul-i **bi-stamrār-in** il-mašrū^c-a
criticising-nom the-man-gen with-persistence-gen this.Msg the-project.Msg.acc
 'the man's persistently criticising the project'
- b. ʔintiḳād-u r-rajul-i **l-mustamirr-u** la-l-mašrū^c-i
criticism.Msg-nom the-man-gen the-persistent.Msg-nom to-the-project-gen
 'the man's persistent criticism of the project'

This suggests that verbal nouns which mark accusative case on their objects are more 'verb-like' than those which do not. Fassi-Fehri argues that more 'verb-like' construct states consist of a verb phrase which is dominated by the DP (22a), while more 'noun-like' constructs consist of a noun phrase dominated by the DP (22b):

- (22) a. [DP [D D ʔintiḳād-u_i] [VP [DP r-rajul-i] [V' t_i [DP il-mašrū^c-a]]]
- b. [DP [D D ʔintiḳād-u_i] [NP [DP r-rajul-i] [N' t_i [PP la-l-mašrū^c-a]]]

2.3 The Adjectival Construct

The adjectival construct consists of an adjective or participle in construct with a noun which specifies the degree or manner of the property expressed by the adjective:

- (23) a. ṭawīl-u ṣ-ṣabr-i
long-nom the-patience-gen
 'long of patience, very patient'
- b. kabīr-u s-sinn-i
big.Msg-nom the-age-gen
 'great of age, elderly'

The adjective agrees with the noun it modifies just as any other adjective does, in number and gender (24a-b) as well as in definiteness (25a-b):

- (24) a. ḥassan-un ṭawīl-u ṣ-ṣabr-i
Hassan.Msg-nom long.Msg-nom the-patience-gen
 'Hassan is very patient.'
- b. laylat-un ṭawīlat-u ṣ-ṣabr-i

Layla.Fsg long.Fsg-nom the-patience-gen
'Layla is very patient.'

- (25) a. *bint-un jamīlat-u l-wajh-i*
girl.Fsg-nom beautiful.Fsg-nom the-face-gen
'a girl with a beautiful face'
- b. *'al-bint-u l-jamīlat-u l-wajh-i*
the-girl.Fsg-nom the-beautiful.Fsg-nom the-face-gen
'the girl with a beautiful face'

This shows that in the adjectival construct the construct head does not inherit the definiteness of the inner NP and hence can be marked with the definite article. These points of contrast between the the adjectival and nominal constructs suggest that they have different structure, and caused the Arab grammarians to refer to the adjectival construct as the *'iḍāfa ġayr-u haqīqiyya*, 'false construct, psuedo-construct'. This has yet to be investigated by Western grammarians (see, however, Hazout 2000 and Siloni 2002 for work on adjectival constructs in Hebrew).

2.4 The Analytic Genitive

In Standard Arabic and in several dialects of the middle-eastern region, the analytic genitive construction has the form of an adjectival construct headed by adjective-like particles which agree in number and gender with the nouns they modify:

- (26) Standard Arabic (Wright 1898, v.II:)
- a. *rajul-un **ḍu** māl-in*
man.Msg-nom poss.Msg wealth-gen
'a man with money'
- b. *jumlat-un **ḍāt** il-wajihayn*
clause.Fsg-nom poss.Fsg the-face.DL
'a sentence with two faces', 'an ambiguous sentence'
- (27) Palestinian Arabic (Mohammad 1999)
- a. *le-ktāb **taba'** eḥmad*
the-book.Msg poss.Msg Ahmad
'Ahmad's book'

- b. eṭ-ṭawle **tabʿat** eḥmad
the-table.Fsg poss.3Fsg Ahmad
 'Ahmad's table'

(28) Egyptian Arabic (el-Tonsi 1982)

- a. is-sikritēra **bitāʿit** mirāt raʿīs ig-gamʿa
the-secretary.Fsg poss.Fsg wife president the university
 'the university president's wife's secretary'
- b. malʿab it-tinis **bitāʿ** in-nādi
pitch the-tennis poss.Msg the-club
 'the club's tennis court'

In other dialects like Syrian and Moroccan, the possessive particle is invariant in form:

(29) Syrian Arabic (Cowell 1964:489)

- a. l-ḥādes šār ʿand əs-sūke **tabaʿ**-na
the-accident.Msg happen.perf.3Msg at the-corner poss-pn1pl
 'the accident happened at our corner'
- b. hal-bərgi **tabaʿ** šu?
this-screw.Msg poss what
 'what does this screw belong to?'

(30) Moroccan Arabic (Harrell 1962:)

- a. l-wəld **dyāl**-ha
the-son.Msg poss-pn3Fsg
 'her son'
- b. d-dār **d**-hād l-ʿinsān lli ž-žār **dyāl**-k
the-house poss-this the-man rel the-neighbor poss-pn2Msg
 'the house of this man who is your neighbor' (Brustad 2000:117)

Because the analytic genitives have the form of adjectival constructs, the possessive particle must be adjacent to the possessor. Likewise, in Palestinian and Egyptian Arabic, the 'bound-t' is pronounced on the feminine form of the genitive particle (Mohammad 1999:):

Mohammad proposes that the analytic possessive in Palestinian and Standard Arabic have a DP-structure which mirrors the structure of clauses in SVO word order. The possessed noun is the 'subject' of the DP headed by the possessive particle, with which it agrees under a

specifier-head relation. For example, (27b) above would have the following structure:

(31) a. [DP [DP **eṭ-ṭawla**] [D' **taba'it** [NP **eḥmad**]]]

Mohammad argues that this analysis supports the overall approach of assigning Arabic noun phrases and clauses parallel structures.

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