Adjectival constructs in Arabic

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1 Introduction

(1) a. imra’-at-un ˇgam¯ıl-at-u -l-waˇgh-i
   woman-f-NOM beautiful-f-NOM the-face-GEN
   ‘a woman with a beautiful face’ (lit. ‘a woman beautiful of face’)
   b. al-raˇgul-u -L`azım-u -l-ḥazz-i
   the-man-NOM the-great-NOM the-fortune-GEN
   ‘the man who is very lucky’ (lit. ‘the man great of fortune)

2 Adjectival constructs as construct state

Construct state features present in adjectival constructs:

- lack of definiteness marking on the head noun:

(2) a. bayt-u-n
    house-NOM-INDEF
    ‘a house’
   b. al-bayt-u
    the-house-NOM
    ‘the house’
   c. *bayt-u
    house-NOM

(3) a. bayt-u -l-raˇgul-i
    house-NOM the-man-GEN
    ‘the man’s house’
   b. (*al)-bayt-u-(*n) -l-raˇgul-i
    (*the)-house-NOM-(*INDEF) the-man-GEN

(4) a. imra’-at-u-n ˇgam¯ıl-at-u-n
    woman-f-NOM-INDEF beautiful-f-NOM-INDEF
    ‘a beautiful woman’
   b. *imra’-at-u-n [ ˇgam¯ıl-at-u-n -l-waˇgh-i ]
    woman-f-NOM-INDEF beautiful-f-NOM-INDEF the-face-GEN
    ‘a woman beautiful of face’
• Nothing can intervene between head noun and genitive complement:

(5) a. al-sayyār-at-u -l-ḥamrā‘-u
   the-car-f-NOM the-red(f)-NOM
   ‘the red car’

b. *sayyār-at-u (-l)-ḥamrā‘-u -l-raḥul-i
   car-NOM (the)-red-NOM the-man-GEN

c. sayyār-at-u -l-raḥul-i -l-ḥamrā‘-u
   car-NOM the-man-GEN the-red-NOM
   ‘the man’s red car’

(6) a. ǧamīl-un ǧiddan
   beautiful-NOM very
   ‘very beautiful’

b. *imra‘-at-un [ ǧamīl-at-u ǧiddan al-ṣaḥī-b-i ]
   woman-f-NOM beautiful-f-NOM very the-face-GEN

c. imra‘-at-un [ ǧamīl-at-u -l-waḥī-b-i ǧiddan ]
   woman-f-NOM beautiful-f-NOM the-face-GEN very
   ‘a woman with a very beautiful face’

3 Adjectival constructs as adjectives

Features of adjectives present in adjectival constructs:

• predicative and attributive use

(7) a. ’anta ʿazīm-u -l-ḥaẓz-i
   you great-NOM the-fortune-GEN
   ‘you are very lucky’ (lit. ‘you are great of fortune’)

b. bayt-un kaṭīf-u -l-ʿabwāb-i
   house-NOM.INDEF many-NOM the-doors-GEN
   ‘a house with many doors’ (lit. ‘a house many of doors’)

• modification by degree adverbs

(8) imra‘-at-un ǧamīl-at-u -l-waḥī-b-i ǧiddan
    woman-f-NOM beautiful-NOM the-face-GEN very
    ‘a woman very beautiful of face’
• definiteness agreement

(9) a. bayt-un ḥaḡariyy-un
    house-NOM.INDEF stone-NOM.INDEF
    ‘a stone house’
b. al-bayt-u ḥaḡariyy-u
    the-house-NOM the-stone-NOM
    ‘the stone house’

(10) a. raḡul-un [ ʾazīm-u ʾḥaẓz-i ]
    the-man-NOM.INDEF great-NOM the-fortune-GEN
    ‘a man who is very lucky’
b. al-raḡul-u [ ʾl-ʾazīm-u ʾl-ḥaẓz-i ]
    the-man-NOM the-great-NOM the-fortune-GEN
    ‘the man who is very lucky’

4 Hebrew adjectival constructs


(11) yalda yefat ʾeynayim/ṣeʿar
girl beautiful.CS eyes/hair
‘a girl with beautiful eyes/hair’

• adjectival constructs are complex adjectives formed in syntax
e.g., meaning is fully transparent, no lexicalisation effect, as is possible with nominal construct states:

(12) beyt ha-sefer
    house the-book
    ‘the school’
    (Hazout 2000, p. 38)


1In Hebrew, definiteness agreement is marked on the genitive noun:

(i) a. naʿara ṣxorat seʿar
girl black hair
    ‘a girl with black hair’
b. ha-naʿara ṣxorat ha-seʿar
    the-girl black the-hair
    ‘the girl with black hair’
c. ḥa-naʿara ṣxorat seʿar
    the-girl the-black hair
    ‘the girl with black hair’
    (Hazout 2000)
• the genitive noun must be an inalienably possessed noun, and the head noun must be its possessor

(13)  a. yalda yefat 'eynayim/se‘ar
      girl beautiful CS eyes/hair
      ‘a girl with beautiful eyes/hair’

  b. *yalda yefat 'ofana‘im/mexonit/bayit
      girl beautiful CS bicycle/car/house
      ‘a girl with a beautiful bicycle/car/house’
      (Siloni 2002, p. 5)

• the genitive noun must be the subject of the adjective

  Obvious problem: the open argument position of the adjective is filled, and hence it should not be possible to use the structure as a predicate.

  Solution: the genitive noun must have a lexical argument position, which becomes the new open argument position of the adjectival construct. Inalienably possessed nouns have such an open argument position:

(14) #the hair is black

5 Problems for the analysis

• How is the possesive argument of the genitive noun promoted to the external argument of the adjectival construct?

  Hazout (2000): “(...) the morphological rule of A+N compound formation [i.e., the formation of the adjectival construct] involves as one of its components the externalization of the internal argument of N.”

  The assumption that a morphological rule affects argument structure is problematic.

  Kim (2002) and Siloni (2002) only mention the phenomenon, but do not work out the syntax of it. (Kim works out the semantics.)

  One possible solution that I could imagine: tough-movement (Chomsky 1981):

(15)  a. John is [ Op, easy [ to please t₁ ]]

  b. yalda [ Op, yefat [ 'eynayim t₁ ]]
      girl pretty CS eyes

  Potential problem: if the genitive noun is the subject of the adjective, we are apparently dealing with predicate inversion structures. (See Bennis, Corver & den Dikken 1998 and den Dikken 1998.) In these structures, however, extraction (out) of the subject after inversion is disallowed:

2In Hebrew and other languages, inalienably possessed nouns actually have special syntactic properties:

(i)  a. ha-rofe badak 1-o 'et ha-‘ozen
      the-doctor examined to-him ACC the-ear
      ‘the doctor examined his ear’
      (Siloni 2002)
(16)  a. John considered { [the cause of the riot]_pred to be [a picture of a politician]_sub }
    b. *a picture of a politician was considered { [the cause of the riot]_pred to be [t]_sub }

For this reason, extraction of an operator out of the possessor argument position of the genitive noun should be impossible.

- Lack of agreement between the adjective and the genitive noun:

(17)  a. ha-ne’arot [ ṣxorot / *ṣxor ha-se’ar ]
      the-girls [ black(f.pl) / *black(m.sg) the-hair ]
    b. na’ar [ yefe / *yefot eynayim ]
      boy [ pretty(m.sg) / *pretty(f.pl) eyes(f) ]
      (Hazout 2000, p. 36)

(18)  a. al-mar’-at-u [ -l-ṣazīm-at-u / *-l-ṣazīm-u -l-ḥazz-i ]
      the-woman-f-NOM [ the-great-f-NOM / *the-great(m)-NOM the-fate(m)-NOM ]
      ‘the very lucky woman’
    b. al-bint-u [ -l-ḡamīl-at-u / *-l-ḡamīl-at-āni ]
      the-girl(f)-NOM [ the-beautiful-f-NOM / *the-beautiful-f-DU.NOM
      -l-ḡayn-ayni ]
      the-eyes-DU.GEN ]
      ‘the girl beautiful of eyes’

- Empirical problems:

  – Kinship nouns, which also have a lexical possessor, are not allowed in adjectival constructs:

(19)  *yalda yefat ‘axot/em/savta
      girl beautiful.cs sister/mother/grandmother
      ‘a girl with a pretty sister/mother/grandmother’
      (Siloni 2002, p. 5)

  – Many nouns that are not generally considered to be inalienably possessed can in fact appear in adjectival constructs. In Hebrew:

(20)  a. zo dira rexavat xalonot
      this apartment wide(f.sg) windows
      ‘this is an apartment with wide windows’
      (Siloni 2002, p. 6)
    b. ’erec merubat ’oxlusin
      country plentiful population
      ‘a country whose population is big’
      (Hazout 2000, p. 29)
    c. ha-yeled mešubac ha-xulca
      the-boy plaid the-shirt
      ‘the plaid-shirted boy’
      (Hazout 2000, fn. 3)
And also in Arabic:

(21) a. bayt-un katır-u l-’abwāb-i
    house-NOM many-NOM the-doors-GEN
    ‘a house with many doors’ (lit. ‘a house many of doors’)
b. al-rağul-u l-’azīm-u l-ḥazz-i
    the-man-NOM the-great-NOM the-fate-GEN
    ‘the man who is very lucky’ (lit. ‘the man great of fate’)
c. ’āṭār-un bālīgat-u l-ḥuṭurat-i
    effects-NOM extreme-NOM the-danger-GEN
    ‘extremely dangerous effects’ (lit. ‘effects extreme of danger’)
d. al-ṣarikāt-u l-muta’-addidat-u l-ḡinsiyyāt-i
    the-companies-NOM the-multiple-NOM the-nationalities-GEN
    ‘the multinational companies’ (lit. the companies multiple of nationalities’)

(El-Ayoubi, Fischer & Langer 2001)

The correct generalisation of the type of noun that can appear as the genitive complement of an adjectival construct is that the noun must name some property or integral part of the head noun.

6 The genitive complement as internal argument

- Genitive in the noun phrase is a structural case (Lindauer 1995, Longobardi 1995):

  (22) a. bayt-u ’ab-ī
      house-NOM father.GEN-my
      ‘my father’s house’ (possessive)
b. ḥall-u l-tālib-i
      solution-NOM the-student
      ‘the student’s solution’ (subject)
c. ḥall-u l-muškilat-i
      solution-NOM the-problem-GEN
      ‘the solution of (to) the problem’ (object)
d. ḥaḡm-u l-ḡurfat-i
      size-NOM the-room-GEN
      ‘the size of the room’ (property-carrier)
e. ʾamal-u l-šāʾir-i
      work-NOM the-poet-GEN
      ‘the poet’s work’ (agent)
f. madrasat-u ’ab-ī
      school-NOM brother.GEN-my
      ‘my brother’s school’ (belonging-to)

- Genitive is assigned to an internal argument: the external argument of a noun is its referential role \( R \), and can therefore not be an overtly realised genitive complement.
Assuming that what is true for the genitive in the noun phrase is equally true for the genitive in adjectival constructs, we have the following observations:

- An adjectival construct is a predicate, and therefore has an external open argument position.
- The genitive complement of an adjectival construct is assigned genitive case, and therefore must be an internal argument.
- The genitive complement of an adjectival construct must name some property or integral part of the head noun.

(23)  

\[
\begin{align*}
\text{Proposal: the internal argument being assigned to the genitive noun is the attribute role of Higginbotham (1985).} \\
\text{The attribute is a role present in the argument grid of any adjective, and is contextually filled, providing a dimension against which the adjective is graded.}
\end{align*}
\]

(24)  

\[
\begin{align*}
\text{The attribute role is assigned to a property of the head noun. Higginbotham’s examples give two possibilities, adjectival constructs introduce a third:} \\
\text{in (24a) the property of being a butterfly is chosen} \\
\text{in (24b) a “hyperonym” property is chosen (animal, entity)³} \\
\text{in (23) the property of flying is chosen}
\end{align*}
\]

³In fact, it does not necessarily have to be a hyperonym property:

\[
\begin{align*}
\text{(i) THAT butterfly is big!}
\end{align*}
\]

According to my intuition, (i) can be read as an exclamation that the butterfly referred to is big for a butterfly, not for an animal or object in general. So given the right pragmatic context, the arbitrary interpretation of the attribute can in fact use the property of being a butterfly.
The idea that the genitive noun denotes a *property* of the head noun is supported by the fact that the genitive noun is not referential in these structures:

(25) ha-yalda yefat ha-’eynayim higi’a. #hen, hayu šxorot va-‘acuvot the-girl beautiful the-eyes arrived. they, were black and-sad (Siloni 2002, p. 12)

(26) daḥalat al-ğurfat-a bint-un ġamiłat-u -l-ša’e-r-i. #kāna ṭawīl-an wa entered.f the-room-ACC girl-NOM beautiful-NOM the-hair.m-GEN. was.3msg long-ACC and ‘aswad-a black-ACC ‘A girl with beautiful hair entered the room. It was long and black.’

7 The **attribute role**

- Higginbotham’s paraphrase of the **attribute role** is *for an X: a big butterfly* corresponds to *something that is a butterfly and that is big for a butterfly*.
- Paraphrase of adjectival constructs is *<A> with respect to <N>: a girl beautiful of eyes* corresponds to *a girl beautiful with respect to the eyes*.
- Paraphrases should only be taken as informal ways of understanding the semantic analysis, not as a formal definition.
- The semantic contribution of a theta role is not fixed, but is partially filled in by context: *John felled the tree vs. the wind felled the tree*.
- The attribute’s contribution is to specify to which property of the subject the adjective actually applies.

References


