# The Genitive in Moroccan Arabic 

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#### Abstract

The genitive relation in Moroccan Arabic (MA) can be expressed in two ways: (1) by the use of a genitive preposition relating the 'possessed' and the 'possessor' nouns (viz. the analytic genitive), or (2) by the juxtaposition of the 'possessed' and the 'possessor' nouns (viz. the synthetic genitive/construct state). In most contexts, the analytic and the synthetic types of the genitive are in free variation in MA, a fact which provides sociolinguists with a good opportunity to study the social and the stylistic distribution of the two syntactic structures. However, there are some constraints on both types of the genitive that a sociolinguist must take into consideration.

In this paper, both formal and semantic constraints on the analytic and the synthetic genitive are brought to light. The paper is divided into four sections. The first section provides a brief discussion of the form of genitive constructions. The second and the third sections introduce numeral and partitive constructions, respectively. It is shown that, in both constructions, there are cases in which either the analytic or the synthetic genitive is possible, depending on the head of the construction, and cases where the numeral or the quantifier behaves more like a determiner than like a head of a genitive phrase. Finally, the fourth section brings forth some of the constraints on contexts where both the analytic and the synthetic genitive seem to be in free variation. These constraints are of semantic, lexical, syntactic and/or phonological nature.


Keywords: Analytic genitive, Synthetic genitive (construct state)

## 1. Introduction

In Moroccan Arabic (MA), there are two syntactic structures in which the genitive relation can be expressed: (a) the analytic genitive which uses a preposition to relate the "possessed" noun with the "possessor" noun, much like the English 'of' in examples like "the book of John", and (b) the synthetic genitive, known traditionally as the construct state (cf. Bentolila 1991; Bouchrit 1997; Eskell Harning 1980), in which the "possessed" and the "possessor" are juxtaposed, as in the English "John's book", with the slight difference that MA does not use any overt case marker. The emergence of the analytic genitive in modern Arabic dialects has been argued to be a consequence of pidginization and creolization of Classical Arabic (cf. Versteegh 1984), but the distribution of the analytic and the synthetic genitives, both intra-dialectally and inter-dialectally, is still poorly understood. A well-known claim made in this connection is that Bedouin varieties show less use of the analytic constructions than urban varieties (cf. Heath 2002; Boumans 2006), but even this hypothesis is still in need of further investigation.

As is the case in English, there is a lot of variation in the distribution of the analytic genitive and the construct state in MA. But since there is very little research on the topic, our understanding of the nature of this variation is still embryonic (cf. Bos 1997; Boumans 2002; 2006). Therefore, this paper aims at providing an account of grammaticality and acceptability judgments of genitive constructions in a major variety of MA, notably that spoken in the big cities of central Morocco. Such an account would serve as an essential basis for future research of the variationist type since it attempts to isolate contexts where variation is allowed from those where only one form of the genitive is acceptable.

## 2. Forms of the Genitive

Before embarking on the grammatical distribution of the analytic genitive and the construct state, some remarks concerning their internal form are in order. Some of the formal characteristics will be shown to be crucial for the use of the two types of constructions.

The first remark concerns the genitive preposition. In the analytic genitive, two prepositions are in use: 'dyal' and 'tas', both of which correspond to the English 'of'. Originally, the two prepositions were used by different groups of dialects, the first being preferred by urban varieties (cf. Marçais 1911; Levi-Provencal 1922; Brunot 1931), and the second by Bedouin varieties (cf. Loubignac 1952). In the present situation, however, their distribution within the new-founded and ever-expanding cities remains to be determined.

The two prepositions also have different forms. In particular, 'dyal' can be manifested under the short form 'd-', though only the full form can co-occur with pronouns, as is illustrated by the following:

| 1) a- 1-makl-a dyal l-klab | c- 1-makl-a dyal-hum |
| ---: | :--- |
| b- 1-makl-a d l-klab | d-*l-makl-a d-hum |
| (the food of dogs) | (the food of them=their food) |

(The asterisk in example (1d) indicates that the phrase is not grammatical.) By contrast, 'tac' has no corresponding short form, but has some dialectal variants most prominent of which are ' $m$ ta $\varepsilon$ ' and 'ntac'. Of the two variants, the first sounds rather archaic and is rarely heard in the central cities, whereas the second is widely used, probably as widely used as 'ta $\varepsilon$ ' ${ }^{1}$.

As to the construct state, the juxtaposition of two nouns gives rise to a variety of morpho-phonological processes. Most of these processes are particularly prominent when the "possessed" noun is feminine. The morpheme ' -a ', which marks the feminine gender when a noun is not in the genitive, changes into /t/ when the noun is annexed to the "possessor", as in the following example:

```
2)a- l-makl-a d l-klab
    b- mak\partiall-t l-klab (dogs' food)
```

(The schwa which shows up in (2b) is dictated by the syllable structure constraints of MA, and need not be discussed here.) There is a small group of nouns which, unlike 'makl-a'(food) in the above examples, do not have their final vowel deleted when the feminine marker is inserted. This group is illustrated by 'bRa'(letter), as is shown by this example:

```
3)a- l-bRa d faTima
    b- bRa-t fatima (Fatima's letter)
```

In such cases, it would be more parsimonious to consider the final vowel as part of the root rather than as a marker of the feminine gender.

There is yet another small group of nouns in which the exponent of gender shows up only when a noun is in the construct state. In the following example, the noun 'Tumubil'(car) does not have an explicit morpheme for the feminine, but the phrase in (b) shows clearly that it is a feminine noun:
4)a- 1-Tumubil d Rašid
b- Tumubil-t Rašid (Rachid's car)
A third (also small) group of nouns comprises those in which the final vowel'-a' is ambiguous as between a root vowel and an exponent of the feminine gender. As a result of this ambiguity, two different forms are attested, as is illustrated by (5):

```
5)a- l-mRa d xu-ya
    b- mRa-t xu-ya
```

[^0]$\mathrm{c}-\mathrm{m} \partial \mathrm{R}-\mathrm{t}$ xu-ya $(\mathrm{my}$ brother's woman $=$ wife $)$

As a consequence of these complicated morpho-phonological processes, the acquisition of the correct construct state forms of feminine nouns generally takes a long time ${ }^{2}$. Furthermore, the phonetic similarity between the prepositional form ' d '(of) and the feminine exponent ' -t ' is probably behind the reanalysis of the latter as a voiceless form of the former in some varieties. In these varieties, cases like (5b), for example, can be analysed not only as a construct state phrase, but also as an analytic genitive phrase in which the preposition is ' $t$ '. As a consequence of this reanalysis, the use of the voiceless form of the genitive preposition has been extended to phrases in which the "possessed" noun is also definite and are, as a result, clearly analytic. Thus, an example like (5a) would be realized as 'l-mRa t xu-ya' (the woman of my brother = my brother's wife).

What is really intriguing about the two genitive constructions in MA, however, is not so much their internal form as their distribution. Although the analytic genitive and the construct state are interchangeable for the majority of nouns, there are cases in which only one of them is acceptable or even grammatical. The remainder of this paper will be devoted to the discussion of these cases.

## 3. Numerals.

The complexity of the genitive in MA is nowhere expressed clearly than in the numeral system. This complexity is due not only to variation between the analytic genitive and the construct state, which may be determined by the nature of the "possessed" noun as well as by that of the "possessor" noun, but also by the syntactic ambiguity of the numerals themselves. To illustrate these points, the numerals will be grouped into three classes for reasons that will become obvious in the course of the discussion, and each class will be tackled separately in a subsection.

## 3.1 'watd'(one)

Apart from all the numerals stands the numeral 'waћd'(one). This numeral does not show any variation between the analytic and the synthetic genitives. Apparently, it has assumed the function of an indefinite determiner. The following examples illustrate some of its uses:

```
6)a- waћd l-ražl (one def-man = a man)
    b- waћd žuž d l-ržal (one two of def-men = two men)
    *c- waћd d l-ržal (one of def-men)
```

Semantically, 'waћd' may be used without any numerical meaning, as in (6b), where it co-occurs with a different numeral without giving rise to any sort of incongruity. The ungrammaticality of (6c) indicates that 'waћd', unlike all the other numerals, cannot occur in

[^1]analytic constructions, where the "possessed" and the "possessor" are related by a preposition.

## 3.2 'žuž'(two)

Exceptional cases apart, the numeral 'žuž' can occur in two semantically similar, but syntactically different, constructions. These are illustrated below:

```
7)a- žuž ktub (two books)
*b- žuž l-ktub (two def-books)
    c- žuž d l-ktub (two of def-books = two books)
```

In the first example, 'žuž' co-occurs with a bare plural noun. The fact that cases like (7b) are ungrammatical indicates that the numeral and the definite article are mutually exclusive, in the sense that either one or the other occurs in the context in question. On the basis of this fact, this numeral can be claimed, quite plausibly, to be a determiner, along with the definite article and probably others. Under this analysis, (7a) would not be an instance of the construct state, but rather of a simple noun phrase. By contrast, (7c) is undoubtedly a genitive construction; the genitive preposition ' d '(of) leaves no doubt on this point. This indicates that 'žuž' can function both as a noun and a determiner. This ambivalence may turn out to be a competition between the two functions.

Indeed, different lexical items show some preference for one structure or the other. In the following, the left-hand examples are more acceptable, more standard, than the corresponding right-hand ones:

```
8)a- žuž drah\partialm a'-! žuž d l-drah\partialm (two dirhams)
b- žuž dqayq b'- ! žuž d l-dqayq (two minutes)
c- žuž frank c'- !žuž frankat(two Francs)
d-žuž d ryal d'- !žuž ryalat (two Riyals)
e-žuž d l-nas e'- *žuž nas (two people)
```

The nouns 'd $\partial \mathbf{r h} \partial \mathrm{m}^{\prime}($ Dirham $)$ and 'dqiqa'(minute) have a stronger tendency to be used with 'žuž' as a determiner than with 'žuž' as a head of a genitive phrase. The ! in (a') and (b') indicates that the examples are rather awkward. The noun 'frank', on its part, is exceptional in that it is used in the singular form not only with 'žuž', but also with all the other numerals. Neither phrases like (c'), where the plural form is used instead, nor the genitive phrase 'žuž d l-frankat' enjoy a wide usage as (c) does. Likewise, 'ryal'(Riyal) is never used in the plural indefinite form in genitive phrases headed by numerals, as would be expected, but shows up under the indefinite singular form. The more regular phrase in (d') has not found its way into the standard usage, though it is not totally unacceptable. The last example under (8) shows
that the plural noun 'nas', which has no corresponding singular form, just like the English 'people', can be used only in a genitive phrase like (e); the corresponding (e') is ungrammatical.

It is not the purpose of this section, nor that of this paper, to be exhaustive as to the behaviour of every single noun with regard to one genitive construction or the other. Suffice it to show that any study of variation in the use of the genitive in MA must take into consideration that different lexical items may have different tendencies, and that some of them may not allow variation at all. This is also the case for the rest of the numerals.

## 3.3 'tlata-eдšra (three-ten)

Unlike 'žuž', the numerals from three to ten (viz. tlata, R $\partial \mathrm{b} \varepsilon \mathrm{a}, \mathrm{x} \partial \mathrm{msa}$, $\mathrm{s} \partial \mathrm{tta}, \mathrm{s} \partial \mathrm{b} \varepsilon \mathrm{a}$, tmnya, təssud, $\varepsilon \partial$ šra) can only form analytic genitive phrases. They do not function as heads of the construct state or as determiners. The only case in which they can function as determiners is with the rather exceptional noun 'frank'(franc) already discussed in the preceding subsection. This restriction, compared with other numerals, may be due to the final vowel of these numerals, which seems to be functioning as an exponent of the feminine gender. The only case in which such a vowel does not occur is 'təssud' (nine); but this numeral has another variant that does have a final '-a', namely 'təsea', and both forms seem to behave like feminine nouns. It should be recalled from section 1 that the feminine marker usually changes into the consonant /t/ when a noun is head of the construct state. This morpho-phonological process activates other processes having to do mainly with the syllabic structure. It is precisely these changes in the form of the numerals that are not acceptable, although they are attested in other varieties of MA (Cf. for example, Loubignac (1952)). As a consequence, examples like the following are ungrammatical:

```
9)a- *tlata ktub (three books)
    b- *tlata l-ktub (three def-books)
```

In (9a), the numeral is a determiner, and in (9b), it is the head of the construct state; but neither phrase escapes the asterisk.

Yet, there is a class of nouns which activate the elision of the final vowel, together with the other concomitant processes, of the three-ten numerals. Some of these nouns are given in the following examples:

```
10)a- t\partiallt yyam (three days)
    b- t\partialmn šhur (eight months)
    c- t\partials\varepsilon snin (nine years)
```

The numerals in these examples all lose their final '-a'; even 'tossud'(nine), which does not have a final '-a', has its final VC truncated in order for it to conform to the C 2 CC template common to the other similar numerals. But the class of nouns which give rise to these
processes is a small one and rather exceptional. It is this class of nouns which still retain the archaic dual, a vestige of Classical Arabic that has long been lost in MA and other modern Arabic colloquials ${ }^{3}$. Even with these nouns, the analytic genitive is not ungrammatical, though uncommon.

Therefore, it may be concluded that, apart from some rare exceptions, the numerals three-ten involve predominantly the analytic genitive.

## 3.4. $\hbar D a \varepsilon \check{s}-$ (more than ten)

Unlike those discussed in the previous subsection, the numerals above ten do not show any strong preference for the analytic genitive, although they do occur in such a construction. Thus, in the following, the right-hand examples are less current than the corresponding left-hand ones:

$$
\begin{aligned}
& \text { b- } \varepsilon \partial \text { šrin wold } \quad \text { b'- ! } \varepsilon \partial \text { šrin d l-wlad (twenty children) } \\
& \text { c- myat }{ }^{5} \text { žmol c'- !mya d l-žmal (a hundred camels) }
\end{aligned}
$$

What is particular about these numerals, as illustrated by the examples in (11a,b,c), is that they take a noun that does not agree with them in number, namely, a singular noun. In fact, even with the analytic genitive, singular nouns do occur with this category of numerals, though marginally so. For instance, instead of 'məlyun d l-drah $\partial \mathrm{m}$ ' (a million Dirham), some speakers may opt to say 'məlyun d l-d $\partial \mathrm{rh} \partial \mathrm{m}$ '. The latter, however, remains more marginal than the former.

In compounds, different numerals show different tendencies. This fact is illustrated clearly by a comparison of the following examples:

> 12)a- tolt mya tolt alaf tlata d l-məlyun/mlayn
three hundred three thousands three of def-million/s
b- $\hbar \mathrm{Da} \varepsilon \check{s} \partial \mathrm{R}$ mya $\hbar \mathrm{Da}$ mš $\partial \mathrm{R}$ alf $\hbar \mathrm{Da} \mathrm{\varepsilon š} \partial \mathrm{R}$ m $\partial \mathrm{lyun}$
eleven hundred eleven thousands eleven million

[^2]While 'mya'(hundred) remains invariable with all eligible numerals, 'alf'(thousand) behaves much like the items in (10) above: it is plural with the three-ten numerals and singular with the remainder. As to 'mdlyun'(million), it behaves more like a regular noun than like a numeral. This is due probably to its recent introduction into the language. However, its liability to occur under the singular form in analytic genitive phrases like (12a) is exceptional.

When occurring with other nouns, compound numerals behave exactly like any other numeral above ten. They take a singular head noun, and tend to behave more like determiners than like heads of analytic genitive phrases, except when a noun does not have a corresponding singular form. These remarks are illustrated below:

```
13)a- R\partialb\varepsilon myat Ražl (four hundred men)
    b-!R\partialb\varepsilon mya d 1-ržal (four hundred of def-men)
    c- R\partialb\varepsilon mya d l-nas (four hundred people)
```

(13b) is undoubtedly less acceptable than the corresponding example in (13a). (13c), however, fares well because 'nas'(people), as has already been pointed out in connection with (8e,e'), is a collective noun.

All in all, numerals in MA generally function both as determiners and as head nouns taking prepositional complements. Apart from the numerals three-ten, the others show a tendency for the former function than for the latter, though this statement is undermined by a large number of exceptions and provisos.

## 4. Partitives

The term 'partitive' should not be understood in any strict sense. As used here, it refers to phrases in which the head noun is preceded by a measure noun or a quantifier, irrespective of whether it involves the use of the preposition ' d '(of) or not. Besides, a lot of cases which would normally fall under the present heading are omitted as they are discussed elsewhere in this paper.

Let us begin by phrases introduced by quantifiers. MA does not have many of these. The most widely used are 'kull' (very/each), and 'bдzzaf' (many/a lot), ‘ši' (some), ‘šwi'(a little/a few). These are illustrated below:

```
14)a- kull wa\hbard (everyone)
    b- b\partialzzaf d l-w\partialqt (a lot of time)
    c- ši ktub (some books)
    d- šwi d l-nas (a few people)
```

The first and the third quantifiers do not take a prepositional complement, and thus, function as determiners, much like most numerals. The other two, however, necessarily take a genitive
preposition, thus forming genitive phrases.
Another pair of quantifiers which have nearly the same meaning as those in (14) are ' $k \partial$ tra' (plenty) and ' $q$ dlla' (scarcity). These behave like feminine nouns and exhibit the ' $a / t$ ' alternation when juxtaposed with another noun, but only marginally take a prepositional complement. The following examples are illustrative:

```
15)a-k\partialtr\partialt l-mašakil (plenty def-problems=many problems)
    b- q\partialll\partialt l-šo}\gamma\partiall (scarcity def-work=little work
```

The fact that these quantifiers take a definite complement and exhibit the ' $\mathrm{a} / \mathrm{t}$ ' alternation makes of them more of nouns than determiners. Therefore, the phrases in (15) are better analyzed as of the construct state type.

As to measure nouns, their tendency to form analytic genitive phrases is so strong that, in most cases, it is the only option. It should be pointed out that the category of 'measure nouns', as used here, includes a variety of nouns which many would find inappropriate to the label. But as long as this practice bears no theoretical implications, we see no harm in it. This class is illustrated by the following examples:

```
16)a- mitru d l-tub a'- !mitru tub (a metre of cloth)
    kilu d l-l\hbar\partialm !kilu l\hbar\partialm (a kilo of meat)
    itRu d l-zit !itRu zit (a litre of oil)
b- Tuba d l-sukkar b'- *Tubt l-sukkar (a lump of sugar)
    \hbar\partialbba d l-zitun *ћ\partialbbbt l-zitun (an olive)
```

These examples have been divided into two groups for convenience only. While the left-hand examples are the most current and the most standard, those on the right-hand differ as to their level of acceptability as well as to their internal structure. Those under (16a'), though not ungrammatical, are only marginally acceptable; they may be even dialectally substandard. But their structure is not one of the construct state: the complement noun cannot be definite. By contrast, the examples under (16b') are instances of the construct state, and they are categorically ungrammatical.

Although most measure nouns and quantifiers take a prepositional complement, detailed examination will certainly come up with a number of items which take, at least variably, a noun complement.

## 5. Constraints on Genitive Constructions

What we have been discussing so far may be considered as the formal aspect of the genitive. The discussion has focused on the structures filtered in and those filtered out by the grammar
of the variety being described. Now we come to a point where some factors contributing either to the use of the analytic genitive or the construct state must be brought forth. These factors, or constraints, are mainly semantic, lexical, syntactic or phonological, and they will be discussed in this order.

### 5.1 Semantic Constraints

The genitive in MA, whether analytic or synthetic, expresses a variety of semantic relations. Examples of these relations are: possession, form, substance, origin, agent, patient, time, space, apposition, etc. Although most of these relations can be expressed equally by the analytic genitive as well as the construct state, some are more natural with one than with the other. Therefore, they will be grouped below on the basis of whether or not they allow variation.

### 5.1.1 Relations Allowing Variation

Generally speaking, nouns can be used in both types of the genitive. The following examples, for instance, express a variety of relations, and they are all as standard under the analytic form as they are under the construct state:

```
17)a- l-ktab d l-tolmid / ktab l-təlmid (the student's book)
    b- 1-ktaba d 1-fqih / ktabt l-fqih (the Fqih's hand-writing)
    c- l-makla d l-ћut / mak \(\partial\) lt l-ћut (the eating of fish)
    d- 1-Sabun d taza / Sabun taza (soap made in Taza)
    e- l-x d dma d 1-lil / xd \(\partial \mathrm{mt}\) l-lil (night work)
    f- l-fTuR d l-zönqa / fTuR l-zönqa (out-door breakfast)
```

As the English translations suggest, each of these examples expresses a different semantic relation. More specifically, these are relations of possession, agent, patient, origin, time and space, respectively. Some of these relations can be expressed through a preposition other than the genitive preposition. In particular, the time/space relation can be, and often is, expressed by the locative preposition ' $f$ '(in). Since all these forms are semantically equivalent, different speakers can use one of them more often than the other(s). It is this fact that makes these and similar semantic relations the best target for a study of variation of the genitive in MA. Such a study would certainly reveal which speakers prefer which construction under what conditions.

Yet, there are always some residual cases. For stylistic reasons or other, some nouns are more currently used in one genitive construction than in the other. For instance, the right-hand example in (17d) above sounds more attractive than the corresponding left-hand example. But in example (18), also expressing a relation of origin, the construct state sounds rather awkward:
18) l-žOllaba d wazzan / ?žOllab-t wazzan(The Ouezzani jellaba)

Frozen expressions and current proverbs also may stand behind the preference of one construction over the other. In the following examples, the construct state is more natural than the analytic genitive simply because the first is a proverb and the second contains a frozen expression:

```
19)a- maši bћal dxul l-ћəmmam bћal xruž-u
    Neg as entering def-bath as leaving-3ps(poss)
    (Entring a bath is not like leaving it)
```



```
    show-me henna hands- 2 p (poss)
```

(Show me the henna on your hands=what you are capable of)
The use of the analytic genitive in these cases would prefer a literal interpretation of the sentences, but otherwise the two constructions are equally acceptable.

A more detailed examination would uncover other factors constraining variability of the genitive. Some of these factors are discussed in the rest of this paper.

### 5.1.2 Relations not Allowing Variation

Among the semantic relations that constrain the variable use of the analytic genitive and the construct state are: substance, content and, to some extent, apposition. These will be considered separately.
5.1.2.1 Substance: This relation refers to cases where the "possessed" noun denotes an object or other, and the "possessor" noun denotes the substance from which that object or other is made. For instance, 'table' and 'wood' in "a table of wood" stand in a relation of substance because the genitive in this phrase means that wood is the substance from which the table is made.

In MA, the relation of substance is almost exclusively expressed through the analytic genitive. In the following set of examples, the examples on the right-hand side are strongly divergent:
20)a- Təbbla d l-xšob / ??Tabl-t l-xšob (a table of wood)
b- me 1 lqa d l-dh $\partial \mathrm{b} /$ ??məzloq-t l-dh $\partial \mathrm{b}$ (a golden spoon)
c- sTOI d l-mika / ?? sTD1 1-mika (a bucket of plastic)

[^3]d- kas d 1-žaž / ?? kas 1-žaž (a cup of glass)
The right-hand examples all sound odd. Not that they are syntactically ill-formed, or that they contain some unacceptable formal features, but simply because their syntactic structure does not comply with their interpretation. That is why a double question mark is put instead of an asterisk. In cases where a second interpretation can potentially be brought forth, irrespective of whether the conditions under which that interpretation is possible are natural or extraordinary, the phrases would be acceptable, but only under that interpretation.

There is possibly a reason why the substance relation, together with the relation of content to be considered shortly, do not allow variability between the analytic genitive and the construct state, as most other relations do. It seems that this can be traced back to Classical Arabic, the ancestor of the modern Arabic vernaculars. In this language, these two relations are expressed not only through the construct state, but also through the ablative case involving the use of the preposition 'min'(from), as in these examples:
21) a- ka?s min ðahab (a cup from gold=a cup of gold)
b- ka?s min xamr (a cup from wine=a glass of wine)

More important perhaps is the so-called 'tamyǐz'(apposition). This syntactic structure can express the two semantic relations without having recourse to a preposition, but only through the accusative case on the "possessor" noun. Thus, the examples in (21) can be reformulated as follows:

```
(22)a- ka?s ðahab-an (cup gold-acc=a cup of gold)
    b- ka?s xamr-an (cup wine-acc=a glass of wine)
```

It is probable that there was an intermediate variety connecting MA to the classical language, and that this variety did not use the construct state to express the semantic relations of substance and content. Instead, it used the ablative preposition and/or the tamyǐz. It goes without saying that this hypothesis remains to be tested.
5.1.2.2 Content: Like the substance relation, this relation strongly favours the analytic genitive over the construct state. The following examples are illustrative of this fact:
23)a- kas d l-q $\partial$ hwa / ?? kas l-q $\partial$ hwa (a cup of coffee)
b- TวbSil d l-šlaDa /?? TдbSil l-šlaDa (a dish of salad)
c- q $\partial$ Rea d l-zit / ?? q $\partial$ Re-t l-zit (a bottle of oil)
The "possessor" nouns in these examples denote objects contained in those denoted by the "possessed". Thus, these "possessed" nouns behave like heads of partitives already discussed in Section 3 above. It should be recalled from that section, especially in connection with the examples under (16b), that heads of partitive phrases also generally do not occur in the
construct state. The similarity between the two types is quite obvious since these nouns function semantically as classifiers: they contribute to the individualization of what is otherwise amorphous.

But counterexamples can be provided, though they are more apparent than real. An example which comes readily to mind is "Tažin l-ћut" (a tajine of fish). A tajine is an earth-ware vessel where a variety of traditional food is cooked. Given what has just been said about the genitive relation of content, this noun would be expected to take a prepositional complement; but the construct state is no less natural. This noun, however, has at least two meanings, one of which refers to the container and the other refers to the content. Apparently, it is this second meaning that is involved in phrases where the noun 'Tažin' is head of a construct state phrase. In this sense, the relation between the head and its complement is one of apposition rather than one of content. It is to the relation of apposition that we turn now.
5.1.2.3 Apposition: The apposition genitive is a structure in which a proper name is annexed to a common noun specifying the class to which the referent of the proper name belongs. For instance, in "the city of New York", the name New York is a complement of the noun 'city', which informs appositively that the name in question is that of a city rather than of a state or whatever. Obviously, the name by itself would be sufficient.

In MA, the relation of apposition, unlike the two previous relations, is best expressed through the construct state. These are some examples:

```
24)a-wad sbu / !l-wad d sbu (the Sebou river)
    b-zit krisTaL / !l-zit d krisTaL (the Crystal oil)
    c-žb\partiall Tubqal / !l-žb\partiall d Tubqal (Mount Toubkal)
```

As indicated by !, the right-hand examples are rather odd. In fact, in most similar cases, the names are often used alone without the appositive elements. However, when the names themselves are based on common nouns, apposition becomes an informational necessity, for there is a risk that the proper name may be interpreted as a common noun. What is more is that, in such cases, both types of the genitive are equally acceptable. Here are some illustrations:
25)a-TabSil l-TuS / 1-TabSil d l-TuS (the Peacock plate)
b- Sabun l-mənžəl / 1-Sabun d 1-mənžəl (the Sickle soap)
It is quite evident that the use of the names alone in these examples would pick up the wrong referents and, thus, lead to miscommunication. Given that different names behave in different ways vis-à-vis the genitive, any study of this syntactic structure should isolate the cases which occur with both types of the genitive from those which are restricted to one type only.

### 5.2 Lexical Constraints

Examples of cases where a lexical item imposes restrictions on the type of genitive to be used with have been amply provided in the preceding sections. These were taken mainly from the class of numerals, quantifiers and measure nouns. But apart from these, nouns generally can be used with the construct state as equally grammatically as with the analytic genitive. But despite this fact, some lexical fields may show a tendency for one form of the genitive rather than the other. Two examples of such lexical fields will be discussed below: kinship terms and body parts.

### 5.2.1 Kinship Terms

MA has a small class of nouns denoting kinship, and most of these nouns tend to be used more often with the construct state than with the analytic genitive, though they are as grammatical with one as with the other (For data from Algerian Arabic, cf. Bouchrit 1999). In the following, for instance, the right-hand examples sound rather of a less natural style than those on the left-hand side:

```
26)a- xal-i / l-xal dyal-i(my maternal uncle)
    b- nsib-u / l-nsib dyal-u(his in-law)
    c- mRa-t xalid / l-mRa d xalid (Khalid's wife)
```

It is not clear whether the construct state and the analytic genitive tend to be distributed differently over styles in the case of other nouns, but they apparently do in the case of kinship terms. The left-hand examples are more natural and would be expected in a spontaneous conversation between intimates, whereas the corresponding ones on the right-hand side sound a bit educated. Since no fieldwork has been carried out to support this observation, it seems more like speculation than a fact.

But there is some formal evidence in support of the stylistic variation of the two forms of the genitive. The core kinship terms in MA are phonologically deficient and, by consequence, syntactically inalienable. That is to say, their form is too short to stand by itself; therefore, it always needs a pronominal suffix to support it. When stripped of these suffixes, the roots simply cannot surface as nouns, as is illustrated below:

$$
\begin{aligned}
& \text { 27) a- xu-h (brother-3pms=his brother) } / * \mathrm{xu} \\
& \text { b- } \mathrm{bb}^{\circ} \mathrm{a} \text { (father. } 1 \mathrm{ps}=\mathrm{my} \text { father) } / * \mathrm{bb}^{\circ} \\
& \text { c- } \mathrm{mm}^{\circ} \text {-ha (mother-3pfs }=\text { her mother } / * \mathrm{~mm}^{\circ} \\
& \text { d- xt-na (sister-1pp=our sister) } / * \mathrm{xt}
\end{aligned}
$$

The fact that these kinship terms do not have the status of phonological words has deprived them from the possibility to be used with the analytic genitive. As a remedial strategy, they
have recently been re-classicized or even replaced by other items which can take a prepositional complement ${ }^{7}$. Thus, the examples under (27) can also be reformulated as:
28)a-1-? ax dyal-u (def-brother of-3pms=his brother)
b-1-?ab dyal-i (def-father of-1ps=my father)
c- 1-?umm dyal-na (def-mother of-1pp=our mother)
d- 1-?uxt dyal-ha (def-sister of-3pfs=her sister)
Under their new forms, the kinship terms stand as full words no longer in need of affixal support. However, being re-classicized and, therefore, linked with the classical language, which only the educated have access to, these forms sound rather high-flown. By extension, even the other kinship terms which did not need to be re-classicized have come to be perceived as pertaining to the educated style when they take a prepositional complement.

### 5.2.2 Body Parts

If the use of kinship terms with the analytic genitive or the construct state is stylistically constrained, with the former being associated with the educated style mainly because of re-classicization, it is not clear whether this carries over to nouns denoting body parts. Unlike the kinship terms, these nouns are not phonologically deficient, and therefore, do not need any remedial strategy such as re-classicization. Therefore, they are grammatical with one form of the genitive as well as with the other. These are some examples:

```
29)a- nif-u / l-nif dyal-u (his nose)
b- ržəl l-Tobla /l-ržol d l-Tobla (the leg of the table)
c- Ras l-b \(\gamma \partial \mathrm{l}\) / 1-Ras d l-b \(\gamma \partial 1\) (the mule's head)
```

Although there is nothing about these examples which seems to favor those on the left-hand side over those on the right-hand side, it seems that the first enjoy wider currency than the second, at least judging from the available written records (Cf. Marçais (1911), Levi-Provençal (1922), Brunot (1931), Loubignac (1952)). Even compound names involving the genitive generally opt for the construct state. Examples of such names are 'Ras ašaqqaR' (the Head of Ashaqqar), 'f $\partial \mathrm{mm}^{\circ}$ zgid' (the Mouth of Zgid), 'Ras l-ma' (the Head (=source) of Water), 'ein 1-luћ' (the Eye of the Board), all of which are place names, and 'Ras 1-ћanut' (the Head of the Grocery=a mixture of spices), and many others. The reasons why the construct state should be favored in this particular semantic field remain to be determined. It should be pointed out that words for body parts have widely noted to have a preference for that synthetic genitive (cf. Claudi \& Heine 1989; Nichols 1986, 1988).

By way of concluding, the examples of kinship terms and nouns denoting body parts show

[^4]how much the variability of the genitive can be constrained by different lexical fields. Besides, the different forms of the genitive can also be associated with different styles. Further research will certainly shed more light on these points.

### 5.3 Syntactic Constraints

In addition to the environments discussed above, in which one of the two forms of the genitive is either banned or constrained, there are syntactic environments which impose similar restrictions on the genitive forms. The most prominent among them are the following:

### 5.3.1 Elliptical Heads

When the nominal head of a genitive phrase is elliptical, that phrase cannot be in the construct state. Given that the construct state is the annexation of a complement noun to a head noun, it is only expected that this sort of annexation will be banned when the head noun is merely assumed. This point is illustrated by (30):
30) dyal-i bћal dyal-k
of-1ps like of-2ps
(Mine is like yours)
It is not clear from this sentence alone what the objects of comparison are. These can only be retrieved from the context of situation. But a head noun can be assumed to underlie the two phrases, although it has no phonological content. The two prepositional phrases in (30) are its complements. The next paragraph will bring further clarification.

### 5.3.2 Pronominal Heads

When the head of a genitive phrase is a pronoun, the construct state is also banned. Here are some examples:

```
31)a- hadi dyal-i u hadik dyal Rašid
    this of-1ps and that of Rachid
    (This is mine and that is Rachid's)
b- huwa dyal l-\varepsilon\partialRbiya u hiya dyal l-fRansawiya
    he of def-Arabic and she of def-French
    (He is (a teacher) of Arabic and she of French)
```

In the first example, the heads of the genitive phrases are demonstrative pronouns, whereas in the second, they are personal pronouns. Both demonstrative and personal pronouns can only take prepositional complements, and thus, are involved only in analytic genitive constructions. Like (30), the examples in (31) are not explicit about the entities being referred to since
pronouns, like elliptical heads, have no semantic content apart from the person, number and gender features. In fact, the demonstrative and the personal pronouns in the two examples above can be argued to be subjects of their clauses, and that the heads of the genitive phrases are elliptical, as in (30). Whatever analysis is adopted, what should be retained for the purposes of this paper is that the construct state is banned in the contexts mentioned.

### 5.3.3 Extraposed Complements

The construct state is also excluded when a complement is forced, for one reason or another, to move further to the right. That is to say, it is no longer adjacent to the head noun, as in (32):

```
32)a-1-Sbд \(\varepsilon\) 1-kbir d l-rž \(\partial 1\)
    def-finger def-big of def-foot
    (The big finger of the foot=toe)
    b-*Sbдを 1-ržOl 1-kbir
    finger def-foot def-big
```

In this example, the prepositional complement is forced to move away from the head noun because the adjective has the priority to occupy that position. In fact, the only possible position for an adjective is to be adjacent to the head noun, as the ungrammaticality of (32b) testifies.

Extraposition of the complement can also be triggered by semantic factors. For instance, the following pair of examples do not receive the same interpretation:

```
33)a-1-sarut d 1-daR dyal-u
    def-key of def-house of-his
    (The key of his house)
b- l-sarut dyal-u d l-daR
    def-key of-his of def-house
    (His key of the house)
```

The prepositional phrase 'dyal-u'(his) is placed in different positions, depending on which noun it is a complement of. Thus, the two positions correspond to two different interpretations. As in the case of (32), the construct state would be ungrammatical when the head noun and its complement are not strictly adjacent. The need for the qualifier 'strictly' is justified when we consider these examples:
34)a- sarut-u d l-daR
key-his of def-house=(His key of the house)
b-*sarut-u l-daR
key-his def-house
When the possessive suffix is attached to the head noun, the complement must be preceded by the genitive preposition. The ungrammaticality of (34b) indicates that the construct state is not allowed when the strict adjacency condition is not satisfied.

### 5.3.4 Multiple Annexations

In principle, there is no limit to the number of complements in a genitive construction. Long stretches of complements, however, are often avoided for the processing difficulties they create as well as for stylistic reasons. More importantly, a mixture of the two genitive constructions is often perceived as more elegant than the use of a single construction throughout the whole string of complements. The point is better illustrated by a comparison of the following examples:

```
35)a-!bab daR žaR \varepsilonli
    door house neighbour Ali
b-!l-bab d l-daR d l-žaR d \varepsilonli
    def-door of def-house of def-neighbour of Ali
c- bab l-daR d žaR &li
    door def-house of neighbour Ali
    (The door of the house of Ali's neighbour)
```

Although (35a-b) are grammatical, they are of the sort of unnatural constructions that grammarians often come up with to illustrate a rule. In comparison, (35c) sounds more natural and is very likely to be produced by speakers. Obviously, there are other ways in which the analytic genitive and the construct state can be mixed in this example, some of which will be more acceptable than the others.

Although the cases listed in this section are the most important syntactic environments constraining the use of the two genitive forms in MA, they are not meant to be exhaustive.

### 5.4 Phonological Constraints

Finally, we come to constraints on the genitive imposed by the phonological form of the head noun. These constrain mainly the use of the construct state, while the analytic genitive is relatively free from such constraints. They are various and interact to a great extent with
stylistic considerations. These points will be exemplified by three types of triggers: final vowels, long nouns, and final dental geminates.

### 5.4.1 Final Vowels

V-final nouns exhibit a special behavior in the construct state. It has already been pointed out that feminine nouns, which take a suffixal vowel, undergo a number of morpho-phonological processes. On their part, masculine nouns with a final vowel generally sound odd when in the construct state. In some cases, they may even be unacceptable, as the following examples illustrate:

```
36)a- l-ma d sidi عli / ??ma sidi عli (Sidi Ali water)
    b- 1-muћami dyal-ha / ?? muћami-ha (her lawyer)
    c- l-biru dyal-na / ??biru-na (our desk)
    d-1-sLa d 1-fžor / ??sLa-t l-fžor (the dawn prayer)
```

Of all these examples, those with a prepositional complement are the most natural and the most likely to be produced by native speakers. By contrast, those on the right-hand side are at best less acceptable. In particular, the cases where a noun takes a possessive pronoun complement sound rather like child talk. In fact, children do produce divergent examples, usually by overgeneralization or false analogy. A case in point is the treatment of nouns with a final 'a' vowel as similar to feminine nouns, and thus, they come up with forms like 'ešat l-mskin' (the poor man's dinner), much like 'sLa'(prayer) in (36d), a feminine noun that requires the insertion of /t/ when in the construct state (Cf. Section 1 for more on feminine nouns). Yet, probably because its vowel is radical rather than suffixal, 'sLa'(prayer) is perceived as exceptional. Similarly, although the relation between the head and its complement in (36a) is an appositive one ${ }^{8}$, the construct state is awkward essentially because of the phonological form of the head noun. It should be pointed out, however, that there are many exceptions to these remarks. This is due probably to the incidence of each item in everyday speech. For instance, because ' $\gamma \mathrm{da}$ '(lunch) and ' $\varepsilon$ ša'(dinner) are very frequent in day-to-day conversation, they are quite normal with possessive pronoun complements, though they remain unacceptable with noun complements.

### 5.4.2 Long Nouns

The majority of MA nouns, and words for that matter, are at most disyllabic. But the contact with French has made way for a lot of loanwords which do not have a short form. Those loanwords which are more than two syllables long generally do not occur in the construct state. The following examples illustrate this point:
37)a- 1-uRdinatær dyal-ha / ??uRdinatœr-ha (her computer)

[^5]```
b- l-mikanisyan d l-walid /!mikanisyan l-walid (my father's mechanic)
```

The head nouns in these examples are both four syllables long. The construct state phrases in which these nouns are heads do not sound normal. The one involving a pronoun complement is strongly divergent, when compared to the corresponding less divergent one in (37b), where the complement is a noun. Even some disyllabic nouns of foreign origin, such as 'kaskruT/sandwitš' (sandwich), exhibit similar behaviour to the extent that one may wonder whether this is due to their phonological form or to their foreign origin.

### 5.4.3 Final Dental Geminates

Feminine nouns with final dental geminates also resist the construct state for obvious reasons. It should be recalled from Section 1 that the exponent of the feminine gender, 'a', changes into the dental consonant /t/ when a noun is the head of a construct state phrase. Now, if the feminine marker is preceded by a dental geminate, the process of vowel-to-consonant change would result in a cluster of three dental consonants, a sequence that is simply not permitted in the language. These are some examples:
38)a-l-maћ $\partial \mathrm{TTa} \mathrm{d} \mathrm{l-RbaT/*ma} \mathrm{\hbar} \partial \mathrm{TTt}$ l-RbaT (the Rabat station)
b-1-\& ddda d 1-slaћ / *\& 2 ddt 1-slaћ (munition)
Although the number of items to which this constraint applies is small, the constraint itself is categorical. New nouns introduced into the language will certainly opt for the analytic genitive when they are of the feminine gender and have a final dental geminate.

All in all, phonological constrains on the genitive are too numerous to classify or list exhaustively here. Some of them may not even be understood at this stage. Therefore, the cases just cited are mere examples to illustrate the point that phonology interacts with syntax to determine surface forms.

## 6. Conclusion

This paper has shown that MA is a language that uses, perhaps redundantly, two syntactic structures to express one and the same type of meaning. Yet, although the analytic genitive and the construct state are interchangeable in most contexts, there are many factors that, to a greater or lesser extent, determine the choice of the one or the other. Most prominent among these factors are the semantic, the lexical, the syntactic and the phonological factors. The dialectal and the stylistic factors are no less decisive, but they are still pending for serious research.

## References

Bentolila, F. (1991). La possession en berbére. Modéles Linguistiques, 13, 25-30.
Bos, P. (1997). Development of bilingualism: A study of school-age Moroccan children in the Netherlands. Tilburg: Tilburg University Press.

Boucherit, A. (1997). L'expression du rapport de dépendence. Constructions synthétique et
analytique en arabe algérois. Afroasiatica Neapolitana, 6, 63-67.
Boucherit, A. (1999). Relation d'appartenance, nom de parenté et substrat berbére. In L.
Tonelli (Ed.), Afroasiatica Tergestina: Papers from the 9th Italian Meeting of Afro-Asiatic (Hamito-Semitic) Linguistics, Trieste, April 23-24,1998, pp. 175-186. Padova: Unipress

Boumans, L. (2002). Possessive constructions in Morocco and in the Netherlands. In A. Youssi, F. Benjelloun, M. Dahbi \& Z. Iraqui-Sinaceur (Eds.), Aspects of the dialects of Arabic today: Proceedings of the 4th Conference of the International Arabic Dialectology Association (AIDA).Marrakesh, Apr. 1-4, 2000. In honour of Professor David Cohen, pp. 265-276. Rabat: Amapatril. http://dx.doi.org/10.1017/S1366728906002598

Boumans, L. (2006). The attributive possessive in Moroccan Arabic spoken by young bilinguals in the Netherlands and their peers in Morocco. In Bilingualism: Language and Cognition, 9(3), 2006, 213-231. Cambridge University Press.

Brunot, L. (1931). Textes arabes de Rabat, Vol1.PIHM 20, Rabat
Claudi, U., \& Heine, B. (1989). On the nominal morphology of "alienability" in some African languages. In R.-D. Botne (ed.), Current approaches to African linguistics, 2-19. Providence, RI: Foris

Eksell Harning, K. (1980). The analytic genitive in modern Arabic dialects. Göteborg: Acta Univ. Gothoburgensis.

Heath, J. (2002). Jewish and Muslim dialects of Moroccan Arabic. London: Routledge Curzon.

Levi-Provençal, E. (1922). Textes arabes de l'Ouargha. Dialectes des Jbala (Maroc septentrional). Leroux, Paris.

Loubignac, V. (1952). Textes arabes de Zaër. PIHEM 46. Paris
Marçais, W. (1911). Textes arabes de Tanger. Leroux, Paris
Nichols, J. (1986). Head-marking and dependent-marking grammar. Language, 62(1), 56-119.

Nichols, J. (1988). On alienable and inalienable possession. In W. Shipley (Ed.), In honor of Mary Haas: From the Haas Festival Conference on Native American Linguistics (pp. 557-609). Berlin: Mouton de Gruyter.

Versteegh, C. H. M. (1984). Pidginization and creolization: The case of Arabic. Amsterdam \& Philadephia: John Benjamins. http://dx.doi.org/10.1075/cilt. 33


[^0]:    ${ }^{1}$ Both 'dyal' and 'ta $\varepsilon$ ' inflect for number and gender. The first has the following forms: 'dyal'(masculine singular), 'dyalt'(feminine singular), and 'dyawl'(plural), while the second has these forms: 'tac'(masculine singular), 'tact'(feminine singular) and 'taw $\varepsilon^{\prime}$ (plural). Of all these, the masculine singular form is the most unmarked form as it can co-occur with all types of head nouns, whether singular or plural, masculine or feminine.

[^1]:    ${ }^{2}$ Although there are no serious studies on the acquisition of the MA genitive, some facts derived from personal experience indicate that the process takes longer than the acquisition of most other grammatical structures. My daughter, for example, is almost nine years old but is still producing incorrect structures such as 's $\partial \mathrm{nDala}-\mathrm{ti}$ (my slipper), 'k $\partial \mathrm{bda}$-ti'(my liver), etc. without deleting the final ' $a$ ', not to speak about semantic constraints, which are often flouted.

[^2]:    ${ }^{3}$ In fact, there are items which can form the dual but require the analytic genitive with the three-ten numerals. For example, 'sactayn'(two hours and 'qวsmayn' (two minutes) are only marginally transformed as 't $\partial l \mathrm{lt}$ swayz' (three hours), 'Rb $\varepsilon$ qsam' (four minutes), etc. The more standard versions are 'tlata d l-swayz' (three of def-hours),'Rдbea d 1-dqayq' (four of def-minutes), etc. By dint of interpretation, it can be said that nouns are moving from the exceptional class to the more regular one.
    ${ }^{4}$ The /R/ in this example is characteristic of the numerals eleven-nineteen. It is a vestige of the corresponding Classical Arabic cognates, but does not show up except in phrases like those in (11) and in compound numerals. In the variety described in this paper, it is often realized as the lateral /l/. So, it is not unlikely that some speakers analyze it as a definite article.
    ${ }^{5}$ This example is reminiscent of $(5 b)$ discussed in the first section. There, it was pointed out that such cases stand behind a reanalysis of $/ \mathrm{t} / \mathrm{as}$ a genitive preposition instead of an exponent of the feminine gender. It is indeed the case that a voiced and a voiceless realization of this consonant are both attested with some nouns such as 'ryal'(Riyal); viz. 'myat ryal'-'mya d ryal'.

[^3]:    ${ }^{6}$ Nouns which still retain the vestige of the classical feature of nunnation drop it when the affixal possessive pronoun is introduced. This class includes mainly nouns referring to such body parts as eyes ( $\varepsilon$ inin), ears (w $\partial \mathrm{dnin}$ ), hands (idin), feet (rəžlin), etc.

[^4]:    7 'walid' and 'walida' are often used to refer to one's father and one's mother, respectively. Also, 'xwadri' and 'xwadriya', though slang words, are used for 'brother' and 'sister', respectively.

[^5]:    ${ }^{8}$ It should be recalled from Section 4.1.2 that the relation of apposition favors the construct state over the analytic genitive, especially when the appositive complement is a proper name, as is the case with (36a).

