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SEMANTIC GENDER DIVERSITY AND ITS ARCHITECTURE IN THE GRAMMAR OF ARABIC[1]

Contrary to the widespread sex-based typology/theory of Gender (found in e.g. Caspari/Wright (1858/1971) for Semitic, or Corbett (1991) for various languages, back to Jacob Grimm (1785-1863)), the feminine (or Gen(der)) in the standard and colloquial Arabic varieties connects strongly to *individuation*, *quantity*, or *size*, as in Brockelmann for Semitic (1910)), or Brugmann (1897) for Indo-European, back to the various sources in the Arabic grammatical tradition (including Sibawayhi (8th c.), and Suyutii (15th c.), among others).[2] The feminine expresses also *evaluation* ('depreciative', 'appreciative', 'endearing', etc.), as is partially described in Arabic traditional grammars, and appropriately extended here. Finally, Gen expresses *perspectivization* of plurality (in line with Leiss (1994), among others), or it contributes to *performativity* in expressive contexts (as will be shown). Moreover, Gen is far from being limited to a nominal categorizing feature (or a derivational) forming *n* (as in a number of works in the Distributed Morphology framework, including Kihm (2005), Lowenstamm (2008), or Kramer (2014), to cite a few). It is rather multi-layered, or distributed over various layers of the DP (and CP) structure (in line with Steriopolo & Wiltschko (2010), Pesetsky (2013), Ritter (1993), among others), and in fact more granular, as we will see.

In this contribution, I first present instances of the rich semantic diversity of Gender, as illustrated by Standard and Moroccan Arabic varieties, in contradiction to the oversimplied picture provided by most typologists, and even a number of generative theorists. Second, I investigate properties of the *singulative* construction, and especially what I will call the *plurative* construction, both of which are marked by feminine morphology, and control (a special form of) *gender agreement*. Third, I discuss essential characteristics of the poly-valued agreement involved in plurative expressions, which I argue to be *perspective-oriented*. Fourth, I provide a brief sketch and motivation of *five potential layers* of Gen structure that produce the various interpretations of Gen, including the evaluative 'performative' Gen, making use of a minimalist distributed model of grammar (based on Chomsky (1995), Halle & Marantz (1993), Marantz (1997, 2001), and Embick & Noyer (2007), among others). Fifth, depending on the structure layer and whether it is + or -interpretable, Gen makes use of multiple features and values, including ±fem, ±indiv, ± group, ±small/big (size),

[1] Part of this work was presented at many occasions, including at Paris VII University ling-lunch on February 2015, Qatar University Linguistic Gulf 5 Conference Keynote address in March 2015, the Linguistic Society of Morocco Workshop in April 2014, the Syntax Workshop of Arabic Varieties in Geneva in August 2015, and the SLE Conference in Leiden in September 2015. I would like to thank the audiences there, and acknowledge helpful discussions, remarks and comments by Bernard Fradin, Peter Hallman, Anna Maria Di Sciullo, Noam Chomsky, Sylvain Bromberger, David Pesetsky, Marten Mous, Frederic Hoyt, Shigeru Miyagama, Ur Shlonsky, Ahmad Rizwan, Noha al-Shorafa, Maathir Al-Rawii, Margherita Pallottino, Pascal Amisli, Danièle Godard, and the anonymous reviewers. The usual disclaimers apply.

[2] Similar remarks apply to its kin, though distinct, animacy-based view (as in Dahl 2000, among others).

±endearing or ±good/bad (evaluative/expressive), etc. Overall, the article aims at providing a more exhaustive and integrative description of the Arabic gender peculiarities than the sex-based/n-based view can allow for. The multi-layered/polysemous view (which can be qualified also as *constructional*) provides new grounds for conceiving variation in Gen and its interpretation, in contrast to the dominant 'lexical' or 'natural' (*n*) view.

1. The many various meanings and uses of Gen

1.1. Sex-based Gen

'Natural' sex gender (interpretable as FEMALE/MALE) plays only a partial productive role in the grammar of Arabic 'inflection' (the *-at* suffix often marking the feminine). In (1), the feminine suffix *–at* is added to the 'masculine' form to derive the feminine:[3]

(1) kalb 'dog'; "he-dog" → kalb-at 'dog-fem'; "she-dog"

But the feminine is also largely expressed as an (inherently) 'lexical' gender, as in (2):

(2) a. qird 'monkey'; "he-monkey" → qišš-at "she-monkey"
b. ḥimaar 'donkey'; "he-donkey" → ʔaṯaan "she-donkey'

Note, however, that the morphological feminine tends to expand and replace its 'lexical' counterpart in modern standard usage, as exemplified in (3) from SA:

(3) a. qird 'monkey'; "he-monkey" → qird-at 'monkey-fem'; "she-monkey"
b. ḥimaar 'donkey'; "he-donkey" → ḥimaar-at 'donkey-fem'; "she-donkey"

In the colloquials, more regular morphological forms tends to be used, as exemplified by the Moroccan Arabic (= MA) pairs in (4):

(4) a. qard 'monkey'; "he-monkey" → qard-a 'monkey-fem'; "she-monkey"
b. ḥmaar 'donkey'; "he-donkey" → ḥmaar-a 'donkey-fem'; "she-donkey"

1.2. Formal Gender

Formal 'idiosyncratic' gender has been claimed to be a property of nouns like the following:[4]

(5) a. šams "sun", fem (compare with French 'soleil', masc)
b. qamar "moon", masc (see French 'lune', fem)
c. nahr "river" , masc (see French 'rivière', fem)

(6) 'double gender' nouns
a. suuq kabiir, kabiir-at "a big market" (masc or fem)
b. ṭariiq muʕwajj, muʕwajj-at) "a curved road" (masc or fem)

1.3. Less 'orthodox' meaning genders

In this subsection, I give a list of some 'unorthodox' gender meanings, which are regular and productive, and which question the validity of the widespread sex-formal view, as

[3] I limit myself here to the investigation of the morpheme *–at*, which is the most active exponent of the feminine, not only in Semitic, but also in other African languages as well (see e.g. Berber and Hebrew). Other forms do not appear on both probes and goals, and do not expand through Afro-asiatic varieties, being rather variety-specific. See Shay (2014) & Hasselbach (2014), among others.

[4] Note, however, that the 'formal' nature of such cases is precisely questioned by the most 'naturalist' scholars, back to Adelung and Grimm, or culturalists, relying on metaphorical or 'mythological' uses. See below, section 2.1 and 4.1 for relevant discussion.

championed by Corbett, among many others. But the list, though appealingly diverse, does not pretend to be exhaustive.

1.3.1. Singulative

In singulative expressions (traditionally called 'nouns of unit' *ism waḥd-ah* by Arabic traditional grammarians), a 'feminine' suffix (*-at*) forms a singular nP denoting a discrete unit entity from a kind (non-human) base, and it controls feminine agreement (although the controller is not semantically a female):

(7) a. naḥl 'bee'; "bees" → naḥl-at 'bee-unit', "a bee"

b. štaray-tu samak-an kabiir-an, samak-at-an kabiir-at-an
bought-I fish-acc big-acc, fish-unit-acc big-fem-acc
I bought big fish, a big fish.

The noun which bears the suffix –at here is known as 'singulative' in the literature, and it does not count as a female.
It has been qualified as playing essentially the same role as an individualizing classifier ('count' or 'unit' classifier).[5] Typologically in fact, the singulative is closer to a noun Class than to a Classifier, although it fulfils essentially the same role.[6]

1.3.2. Plurative

In plurative expressions, the same gender morpheme *–at* forms a *group* or a collection individual from a singular or a plural of individuals:[7]

(8) a. saakin "inhabitant" → saakin-at "inhabitants; population";

b. muʕtazil(-ii) «a solitary" ; "a member of the (so named) theologian thinker group" → muʕtazil-at "the (so named) theologian thinker group";

b. naṣraan-ii "a Christian individual" → naṣraan-iyy-at 'christian-fem' "christians (as a community)" (also a female Christian)

(9) a. kaafir "unbeliever" → kafar "unbelievers" → kafar-at "unbelievers (as a group)"

b. barbar "berber-kind" → baraber "berbers" → baraber-at "berbers as a community".

In the relevant cases, the constructed nP can denote a kind of unitized entity (or integrated whole), and the morpheme contributes to shape this unit or whole. The feminine morpheme can then be thought of as a sort of classifier (or a "grouper"). I return later on to the adopted terminology, and to the properties of both the singulative and the plurative. Note that the plurative can also control a feminine singular agreement, as we will see below.[8]

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[5] See Greenberg (1972), after the Arabic tradition, Fassi Fehri (2003, 2012), Zabbal (2002-2005), and Mathieu (2012).

[6] The comparison has been made by Seifart (2010), using distinctive criteria, as well as Crisma et al. (2011), among others, comparing gender, noun class, and classifier systems. The Chinese classifier type is singled out as not implicating agreement, contrary to the other two (in Romance and Bantu), which appear to be closer to each other. See also Carstens (2008, 2010) for futher comparative comparison, built in a strictly formalist (or uninterpretable) view of Gender.

[7] See Ojeda (1992) and Fassi Fehri (1988a, 2012) for groups in Arabic.

[8] Regarding some plurals like *tilmiiḏ* → *talaamiiḏ* → *talaamiḏ-at*, Peter Hallman (p.c.) wondered whether the *–at* here has any semantic content. Likewise, Frederic Hoyt (p.c.) asked me whether the *–at* that appears on *masdars* ('event nouns') of weak verbs, like *taqwiyy-at* 'reinforcement' can have any semantic content. The answer is presumably negative. Traditional Arabic grammarians qualify the *–t* in these cases as purely formal, and name it the "*–t* of compensation" (*taaʔ al- ʕiwaḍ*), being basically a phonological substitute (or suppletive) for the glide *–y* (or a long vowel in relevant contexts). But while the role of *–t* in some limited morphonological contexts is arguably only formal, the more general feminine morpheme in the case of contentful pluratives does not play any such a role; e.g. there is nothing elided or replaced in the examples

1.3.3. Non-human-based plural gender

The *± human* opposition (rather than sex) is a relevant feature for plurals. Non-human plurals are then treatd as 'feminine singular':

(10) l-kilaab-u nabaḥ-at (* nabaḥ-uu 'barked-pl')
the-dogs-nom barked-fem
The dogs barked.

But they are not semantically feminine, as (10) can be a statement about a plurality of male dogs. Nor are they semantically singular, because they denote a plurality, and they support reciprocity:

(11) l-kilaab-u t-aʕaḍḍ-u baʕḍ-a-haa baʕḍ-an
the-dogs-nom fem-bite some-acc-her some-acc
The dogs bite each other.

The system then turns out to be more complex, not only because it involves both sex-based and human-based specifications, but also because singularities and pluralities call for distinct genders. Moreover, many other meanings or functions of the feminine remain outside the oversimplified picture, and counting 'the number of genders' (2 or 3 or more), a frequent practice of typologists, turns out to be a non-easy matter given the complexity so far established.

1.3.4. Gendered diminutive

When a diminutive is (internally) formed, the morpheme *–at* can be suffixed to it; it then expresses 'intensive' decrease in size, 'evaluativeness', or eventually a 'unit reading', as is exemplified by the various meanings of (12):[9]

(12) zayt 'oil' → zuwayt 'oil-dimin'; "small quantity of oil"
→ zuwayt-at 'oil-dimin-fem';
a. intensive: "an extremely small quantity of oil";
b. evaluative: "a beloved small quantity of oil"
c. unit reading: "a discrete small quantity of oil";

1.3.5. Gendered augmentative

First, an augmentative is (internally) formed, then *–at* is affixed to it; it then functions as intensive or evaluative:

(13) raaḥil "travelling, traveller" → raḥḥaal "a big traveller"
→ raḥḥaal-at 'traveller + augment+ fem'
a. intensive: "an extremely big traveller";
b. evaluative: "an acknowledged big traveller"

See also: baaḥiṯ "researcher" → baḥḥaaṯ-at "a great (famous) researcher"; ʕallaam-at "a great (well-known) scholar", nammaam-at "an extreme gossiper", etc.[10]

1.3.6. Gendered event units

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(8) or (9), in the relevant sense. Furthermore, the feminine morpheme plays an important role in semantics and discourse, as I will explain below.

[9] I use 'evaluative' and 'expressive' interchangeably, contrary to some literature which takes evaluativeness to cover both descriptive/quantitative and expressive/qualitative meanings. See Fassi Fehri (2015) for detail and references, as well as Grandi & Körtvélyessy (2015).

[10] In fact, the *–at* can be seen as a delimiter of some sort here (perhaps delimiting the summum of some quality) in the intensive case.

As shown in Fassi Fehri (2005), an event nominal acting as a cognate object can express a *kind event*, as in (14a), where it denotes that one or more dances have been performed, or a countable *event unit* (or instance) as in (14b):

(14) a. raqaṣa raqṣ-an
danced dance-acc
He danced some dancing.
b. raqaṣa raqṣ-at-an; raqṣ-at-ayn
danced dance-unit-acc; dance-unit-dual
He danced a dance; two dances.

See also: *qahqah-a qahqah-at-an* "He laughed boisterously a burst of laughter"; *zaʕzaʕa zaʕzaʕ-at-an* "He troubled a trouble", etc.[11]

1.4. More known, but less integrated: gendered abstract nouns

Abstract nouns or concepts which name qualities, doctrines, sects, etc. also behave syntactically like feminine nPs, and they are affixed with the feminine marker:

(15) a. suhuul-at-un kabiir-at-un
easy-fem-nom big-fem-nom
"a great easiness"
b. ʕuruub-at "arabity"; zunuuj-at "negritude"; muzuuġ-at "berberity"; fuḥuul-at "virility"; nuʕuum-at "softness"; buṭuul-at "championship"; xušuun-at "roughness"; nubuuʔ-at "prophecy"
c. naṣraniyy-at "christianity"; buuḏiyy-at "buddhism"; yahuudiyy-at "judaism"; majuusiyy-at "zoroastrianism"; "ṭaaʔifiyy-at "communautarism"; ʕunsuriyy-at "racism"; ḥanbaliyy-at "hanbalism", etc.

In most cases, these nouns are formed from an adjectival base to denote the name of the property or quality, or abstract concept. Nouns such as those are often feminine in other languages, as in French *facile* → *facil-ité* "easy-ness", or they change their gender to neutral, as in German. I take the feminine morpheme to be contributing to the meaning of their abstract nominality.

2. A new picture and theory

2.1. Historical schools of thoughts

While addressing the issue of how gender in Indo-European came to be assigned to nouns, Brugmann (1897) provided a thorough critique of the dominant (generalized) sex-based view led by Adelung (and Herder), and implemented in detail by Grimm (*ibid*). According to this theory, "Grammatical gender is the result of the tendency of primitive man to *individualize* and *personify*" [my underlining FF], (p. 7). The early man in his simplicity then assigned sex to all nouns, treating all things as living beings. Brugmann argued instead that nouns that are thought as expressing real physical (or 'natural') sex should be distinguished from those that carry only formal/grammatical gender. For the former class, "the name for the male and the name for the female are formed from different roots … Latin *pater* and *mater*". But in the Latin *deus* and *dea*, or English *god* and *goddess*, "the word for the male and that for the female has the same root", and only the inflectional ending is different (*ibid*). In cases of grammatical gender, [however], "there is but one way of making a distinction, … by inflection". See Latin *animus*,

[11] See Fassi Fehri (1998b, 2005) on some properties of cognate kinds and event units.

anima. Then Brugmann goes on to reject Grimm's theory, on the bases of (a) what we know about IE gender, what it means and says in the speech of everyday life; (b) what we know about gender in other language families of about the same degree of culture, (typically the Semitic-Hamitic group), which does not confirm Adelung/Grimm's thesis that "primitive people without culture are asserted to have had this remarkable impulse to personify and sexualize"; and (c) that Grimm's theory is psychologically improbable.

The "truth" about gender then comes as follows: "The termination *–a* in Latin plural *juga* was a mark of distinction for a *collective signification* [my underlining FF] of the word stem …[a relationship] of a very different character from the antithesis of masculine and feminine, [and a] meaning preserved unchanged in all IE languages", including Latin *fuga* "flight", *juventa* "youth", etc. " (p. 22). The so-called feminine and masculine in accusative *animum* and *animam* show "… that all suffixes … are here irrelevant … these never had a specifically masculine or specifically feminine significance and … nothing whatever to do with such a distinction … the suffix in the so-called masculines … cannot have originally denoted a physical sex (*ibid*).

[It is universally acknowledged] that "those substantives in *–o-s* which denote men or beasts were used primarily as a *general term* for the animal, without regard to sex distinction … Latin *equos* … signifies originally 'horse' in general, and did not have any special meaning like 'stallion'. Not until there appeared by the side of such substantives in *–o-s*, forms with the suffix *–a* to denote the female, did the use of the o-stems suffer any limitation … Latin *equos*, by contrast with *equa* 'mare' [then] acquired the special meaning 'stallion' " (p. 23).

If one examines all words in IE in which the suffixes occur, then he comes to the view that "the original function of these suffixes was to form abstracts and collectives … [a meaning preserved unchanged in all IE; it remains in Latin *fuga* 'flight', *juventa* 'youth', etc.]." "Terms expressing a quality come to be used to denote the individual person or thing which possesses that quality … further, terms of collective signification are employed to designate individuals, … certain abstracts and collectives have become names for females … The final step was for the suffixes to become "productive", with this meaning inherent in them …" (*ibid*).

If the same marker is used for collectives, abstractions, and the feminine, then the "sexual content" of the feminine can be questioned. Leiss (1994) proposes to reformulate Brugmann's insights in terms of *perspectivization*, in the sense that the function of gender is to provide "different perspectives to represent a multitude of entities" (p. 203).[12]

In the same vein, Brockelmann (1910, 126-128) observed that early Semitic distinguished two genders, feminine and masculine, but the distinction had nothing to do at the beginning with natural gender. Moreover, the latter was not first expressed through inflectional morphemes, but by lexical words. In Arabic, for example, describing states typical of females were not marked by a feminine (e.g. *ḥaamil*

[12] According to Unterbeck (2000), quantity is the feature that connects the two categories Num and Gen: Num expresses a multitude, and Gen different perspectives of multitudes. I adopt a perspectivization view of Gen below.

"pregnant", *ʕaaqir* "sterile", etc.).[13] Furthermore, the same inflectional morpheme *–at* (or its variants in Assyrian, Ethiopian, Hebrew, etc.) that expresses the feminine serves also to form abstracts or collectives, etc.[14]

In the Arabic grammatical and philological tradition, regular descriptions of Gen connect feminine, collectives, abstractions, plurals, and intensives, etc. As for evaluation, it is especially included in the Arabic tradition for the diminutive, and only marginally for the augmentative. It will be extended here appropriately.[15]

My program in this contribution is to integrate and adapt these three lines of thought in a formal approach of the sort advocated, taking into account the fact that 'sex' is only an ingredient in a complex Gen phenomenon, which will turn out to be polysemous (expressing or interacting with individuation, quantity, size, or qualitative evaluation), with a grammatical layered architecture that organizes its distribution and interpretation.

2.2. Model ingredients

I assume a (binary) Boolean gender feature system in which various semantic flavors are licensed at the various layers. For example, when Gen is interpreted as ± fem, fem is taken as the (morphologically) marked member of the pair, whereas the masculine is the unmarked value. Likewise, when Gen is interpreted as ± sing, the +sing is marked both morphologically and semantically. When both members of the pair are not morphologically marked, as is the case of what appear to be 'lexical' nouns, I assume that 'conceptual' Gen is 'inherent' in the noun , and the probe bears a morphological mark of Gen. Alternatively, the goal has a hidden gender value which matches its meaning.[16]

Besides, I assume a minimalist model of the grammar, and typically the probe-goal theory of Agree (as in Chomsky (1995), further elaborated by Miyagawa (2010, 2012), and Shlonsky (2012) among others), coupled with a Distributed Morphology implementation, adhering typically to the separation/distribution of "pieces" of lexical items as 'syntactic feature bundles' and 'Vocabulary items', lately inserted in the derivation.[17] Finally, cartography is used as a heuristic tool for implementing syntactic hierarchization.[18]

2.3. Singulativity

[13] The inverse phenomenon is found e.g. with titles that are (usually) strictly devoted to men, such as *ʕumd-at* "mayor", *xaliif-at* "Caliphe', etc.

[14] Three origins of *–at* were postulated by Orientalists: (a) a demonstrative; (b) an intensive; (c) an object marker (like *–et* in Hebrew). But despite disagreement, none of those scholars take sex as an original meaning. See e.g. Fleisch (1961, 311-312) for some relevant discussion.

[15] A large list of references on Gender in Arabic is available, most of which is basically descriptive. Regarding western sources, I refer to Ibrahim (1973) for an early synopsis of the traditions of thoughts, Hachimi (2011) for a good overview of the patterns and issues, in addition to Fleisch (1961), Roman (1990), and Wright (1971; originally written in German by Caspari in 1858, with many Arabic sources included).

[16] See Wechsler (2011) for the treatment of Gen in Italian along similar lines, although in a different model of grammar.

[17] See e.g. Harley (2014) for how three separate 'lists' of the model are distributed in the grammar layers.

[18] See in particular Cinque (2009), and Rizzi (2007).

In this subsection, I provide a first and brief illustration of the model by analyzing singulativity, which encodes a [+indiv] feature.

2.3.1. Essential properties

The following list includes the most salient properties of the singulative:
(a) The singulative is a process by which a collective (and less frequently a mass noun) is turned into a single individual or unit.
(b) It is commonly marked via Gender (or the feminine) cross-linguistically (Arabic, Berber, Breton, Welsh, Somali, Hebrew, Russian, etc.; see Mathieu 2013).
(c) It triggers feminine singular agreement on its target.
(d) It has the interpretation of a singularity (not an inclusive plural).
(e) It can be dualized, pluralized, or counted by numerals.

2.3.2. Some patterns

In (16), the feminine appears to individualize a mass noun:
(16) a. xašab "wood'" (mass) → xašab-at "piece of wood"
b. šamʕ "wax" (mass) → šamʕ-at 'candle-unit'; "a candle"

In (17a), the singulative is singular, and in (17b) dual:
(17) a. ʔakal-tu tamr-at-an (tamr-an)
ate-I date-unit-acc (date-acc)
I ate a date (dates; one or more dates).
b. ʔakal-tu tamr-at-ayn
ate-I date-unit-dual.acc
I ate two dates.

In (18), it is a plural (strong exclusive):
(18) ʔakal-tu tamar-aat-in
ate-I date-unit-plural-acc
I ate (many) dates (exclusive/strong).

2.3.3. Structure

We can see from (17) and (18) that there is no complementary distribution between the individualizer (Div or Class) and Num (#), the dual or the multiplying plural. I postulate (17') as a structure of (18), in which the singulative (Cl) and the plural (Num) co-occur:[19]

[19] Ouwayda (2014), in line with Borer & Ouwayda (2010), although arguing that Num and Gen are separate categories in this sound plural case, maintains the view that the plural there is a mere agreement marker (with a hidden numeral). She further claims that these plurals do not occur in (normal) quantificational contexts. But there is enough data that does not corroborate such a view. Here is a variety of examples:
(i) laa y-ajuuzu ʔaxḏ-u šaʕar-aat-in min-a l-liḥy-at-i
not 3-allow taking-nom hair-fem.pl-gen from the-beard-gen
It is not allowed to take hairs from the beard. (Adapted from google http://islamqa.info/ar/137251)
(ii) bayna-naa xilaaf-aat-un kaṯiir-at-un
between-us discordance-fem.pl-nom many-fem-nom
There are many discordances between us.
(iii) fawqa l-qimatri tufaaḥaat-un ḥamraaʔ-u wa-ʔuxraa ṣafraaʔ-u
on the-shelf-gen apple-unit.pl-nom red-nom and-other yellow-nom
On the shelf, there are red apples, and also yellow ones.
(iv) štaray-tu bidʕ-a samak-aat-in
bought-I few-acc fish-unit.pl-gen
I bought few pieces of fish.
In Moroccan Arabic, an overt indefinite quantifier (*ši*) can be used freely with such forms:

(18') NumP (#P)
/ \
Num/# Cl/DivP
| / \
Pl Div n
| | |
aa at tamr (tamar-aat)

3. The plurative

Contrary to the singulative, the *plurative* is only marginally mentioned in the literature, identified, or investigated. Few rather informal uses of this term are found in Africanist literature (see e.g. Dimmendaal (1983), Mous (2008), and Treis (2014)), basically seeing it as the opposite process to the singulative. Discussing Hayward's (1984) observation that in the Cushitic language Arbore, many nouns have a general form (which is non-specific as to the singular/plural distinction), although they can be pluralized, as in:

(19) kér "dog (s)" → ker-ó "dogs"

Corbett (2000, p. 17, fn. 11) made the following comment: " If one uses 'singulative' consistently for singular forms which correspond to a more basic plural form, then it would be logical to use the term 'plurative' for plural forms which correspond to a more basic singular, as in *kér* "dog" ~ *ker-ó* "dogs" above, as suggested by Dimmendaal (1983: 224)".

Note, however, that *kér*, as pointed out by Corbett himself, is not a singular, but rather a general form. Compared to the singulative then, the plurative can be seen as taking the opposite path, as schematized in (20):

(20) a. 'collective' → singulative
b. plurative ← 'collective'

3.1. A disputed terminology

In the Africanist literature, the plurative appears to be a process by which a strong or distributive plural can be derived from a base which is a general noun (see Mous 2008). The Arabic parallel of such a process is the plural of a collective, which is rather exclusive. Compare:

(21) a. samak "fish" (collective) → samak-at "a fish unit" (singulative)
b. samak "fish" (collective) → ʔasmaak "many fish" (plurative)

(v) šrit ši ḥut-aat ṭriyy-at
bought-I some fish-unit.pl fresh-fem
I bought some fresh pieces of fish.

(vi) š-bin-k w-bin ši ʕyal-aat
what-between-you and-between some woman-fem.pl
Why are looking for women?

In fact, the diversity of the contexts in which the sound feminine plural occurs may lend credence to the view that it is the default form (see Alshboul et al (2013) for discussion), though the issue is beyond the scope of this contribution.

c. baqar “cows” → ʔabqaar “many cows”, šajar “trees” → ʔašjaar “many trees”, etc.

Mous (p.c.) informed me that the plurative can in fact be formed from any base (including the singular). Its important property is that it triggers a ‘third’ gender agreement (which takes the form of a plural (according to Mous 2012).

I claim that the Arabic plurative (as I construe it) provides the minimal closest plural counterpart of the singulative. As for the Africanist plurative, it is more complex, and further research is needed to see how it connects to Gender (or Class). The Arabic plurative (like the singulative) is typologically closer to (noun) Class and Gender than to Classifier. It triggers Gen/Class agreement, unlike normal classifiers.[20]

3.2. Essential properties

The most salient properties of the plurative include the following:

a. Our term ‘plurative’ (in the narrow Arabic sense) is distinct from normal plurals. It designates a process by which a collective (a singular, or a plural) nP is turned into a group unit (or a collection unit). The result is (normally) interpreted as a group, or a collection unit.

b. Morphologically, the plurative carries the same feminine suffix as the singulative (namely *-at*). It can be marked on the controller nP, or the target (verb or adjective), or both.

c. Syntactically, it takes part in gender agreement. But contrary to normal gender agreement in which gender can be dropped in the VSO order (as opposed to SVO), plurative gender cannot be dropped.

d. From the semantic point of view, the plurative express a plurality, or more precisely a ‘perspective’ on plurality, rather than semantic gender (or feminine). It controls reciprocity, or plural predication, etc.

e. When the plurative nP participates in normal plural agreement, it ‘looses’ its group meaning. Such a dual behavior, as manifested by polyvalued agreement, recalls that of ambiguous collectives (see subsection 3.4. below).

f. The plurative is potentially countable, and can undergo dualization or pluralization in displaced contexts.

g. The plurative if thought of as instantiating a class/gender feature of some sort cannot be assimilated to the singulative, since it manifests various distinct properties.

3.3. Some Patterns

3.3.1. Professional groups

The following examples instantiate the plurative as an expression of groups or corps in Standard Arabic, or Moroccan Arabic (where *–a* is used as equivalent to *–at*), respectively:

(22) ṣaydal-ii “pharmacist” → ṣayaadil-at “the corps of pharmacists”
(karaadil-at "cardinals", dakaatir-at "doctors", etc.)

(23) a. xayyaaṭ “tailor” → xayyaṭ-a ‘tailor-fem’, “tailors” (the corps of tailors)
b. ṣeyyaad “hunter, fishman” → ṣeyyaad-a “the group of hunters (or fishmen)”
(šeffaar-a "thieves"; nejjaar-a "carpenters"; beyyaar-a "well-diggers"; gebbaaṣ-a

[20] The system of noun classes of Bantu is meticulously described in Carstens (2008, 2010), with various comparative consequences. See also fn 2 above, with references given there.

"whitewashers"; gezzaar-a "butchers"; ḥeṣṣaad-a "reapers, harvesters"; etc.)

3.3.2. Ethnic or regional groups

Examples are provided for SA, then MA, respectively:

(24) ʔafaariq-at “Africans”; maraawin-at “Maronites”

(25) jebl-ii ‘mountain-sing’, “an inhabitant of the mountain” → jbal-a “inhabitants of the mountain”; wejd-i “an inhabitant of Oujda” → wjad-a “inhabitants of Oujda”; sraġn-a “inhabitants of the Sraġn-a region”; fwas-a "Fassis”, biḍaw-a "Casablanceses", etc.)

3.3.3. Groups based on property sharing

These are normally derived from adjectives or participles:

(26) a. kaafir “unbeliever” → kafar-at “group of unbelievers”; saaḥir «magician»→ saḥar-at «magicians»; xaaʔin "traitor" → xawan-at "traitors"; saadin "guard, servant" → sadan-at "guards, servants", etc.

b. ʕabqarii "genius"→ ʕabaaqir-at "geniuses"; ʕimlaaq "giant" → ʕamaaliq-at "giants"

Morphologically, it is not important that pluratives (most often) use broken plural patterns as their base, but it is essential that they are gendered by the suffix – *at*. Syntactically and semantically, they exhibit two important properties:

a. They trigger feminine singular agreement on the predicate.

b. They are interpreted as an individualized collection (exhibiting a collective, rather than a distributive behavior).

3.3.4. Collection units

With feminine singular agreement, pluratives behave more like ‘kind/collective’ nouns when the latter are read as collection units:

(27) a. al-furs-u wa-r-rum-u štarak-at-aa fii ḥarb-in
the-persians and-the-romans participated-fem-dual in war-gen
Persians and Romans participated together (as groups) in a war.

b. l-furs-u wa-r-rum-u štarak-uu
participated-pl.masc
Persians and Romans participated together in a war.

3.3.5. Broken plurals

Broken plurals can also be made in the dual, or counted as collection units:[21]

(28) a. jimaal-aan ‘camels-dual’, "two collections of camels"

b. rijaal-aan, 'men-dual', "two groups of men"

(29) a. ṯalaaṯ-at-u rijaal-aat-in
three men-pl.fem-gen
“three collections of men”

b. ʔalf-u rijaal-in
thousand-nom men-gen
A thousand of (distinct) groups of men

Likewise, pluratives can control a dual (or a plural) target:

[21] It is said that *jimaal-aat* "collections of camels" manifests “six (6) plurals” or pluralizations (see Suyuutii, II, 89). For counting collections, see Fassi Fehri (2012, 308); Wright (1971, 191); Ojeda (1992, 322); Acquaviva (2008, 211).

(30) al-muʕtazil-at-u wa-l-ʔašʕariyy-at-u tawaḥḥad-at-aa fii haaḏaa
the-Mutazilite-fem-nom and-the-Asharite-fem-nom unified-fem-dual in this
Mutazilites and Asharites have unified (their view) on this.

The dualization of the plurative agreement suggests that pluratives are potentially countable (for more detail, see below, subsections 3.4 and 3.5).

3.3.6. Double plurals

Plurals like *rijaal-aat*, *buyuut-aat*, seen as a plural of plural, can be interpreted as a plural of a collection, or as an evaluative plural:

(31) a. buyuut-aat
house.pl-pl
i. many many houses
ii. many famous houses
b. MA: rjal "men"; rejjaal-a 'men-fem', "true (strong) men"

3.3.7. MA pluratives

Pluratives are also productive in MA. In addition to professional or ethnic groups, etc., exemplified above, MA has a subtle distinction between a broken plural and a plurative, which takes the plural as a base:

(32) a. qard "monkey" → qrud "(many) monkeys" → qrud-a "monkeys as a class of species"
b. muxx "brain" → mxux "brains" → mxux-a "(brilliant) brains"
c. ḥenš "snake" → (ḥnuš "snakes") → ḥnuš-a "snakes"
d. ʕjel "veal" → ʕjul "veals" → ʕjul-a "veals as a group"

In non-relevant cases, the two forms of plurals can be used interchangeably, typically when one form appears to be missing, as is apparently the case for the middle form in (31c)).

3.3.8. Pluratives are distinct from broken plurals

It is clear from the patterns seen above that pluratives are a special kind of plurals, and they differ in many respects from broken plurals, and hence should not be confused with them (as has often been done in the literature).[22] Recall the following properties:

(a) morphologically, the plurative is formed via the suffix *–at*, and it can have various forms as its base of derivation, including broken plurals and collectives;
(b) semantically, it is interpreted as a group, in the relevant cases;
(c) syntactically, it controls a feminine singular agreement form;
(d) its feminine agreement is insensitive to the VSO/SVO word order alternation, and it cannot be dropped, unlike feminine agreement with broken plurals.
(e) plurativity is syntactically *anchored in discourse*, as we will see below, whereas broken plural formation is not so anchored.
(f) broken plural formation, being essentially morphological, can hardly be seen as syntactically conditioned (as is the plurative case). For example, the broken plural NP does not trigger (or control) a particular type of agreement, as has been argued for the plurative. Even when a specific 'meaning' is assumed as characteristic of the broken plural form (as 'kind' or 'inclusive', as opposed to a 'strong' or 'exclusive' meaning of the sound plural (as assumed by Mathieu (2014) and Ouwayda (2014)), such a contrast (even if true) does not correlate with any (syntactic or semantic) agreement contrast.

[22] For this confusion, see Acquaviva (2008), after Zabbal (2002-2005), and the critique made in Fassi Fehri (2012, 302-303, fn. 10 & 11).

The confusion seems to arise because broken plurals (in addition to pluratives and collectives) do occur in plurative constructions (as in the examples (32) below, where the broken plural (in 32a) is used 'pluratively', in parallel to its plurative kin in (32b)), whereas sound plurals are not usually used here in this context:

(33) a. t-aquulu r-rijaal-u
fem-say the-men-nom
Men (as a group) say …
b. t-aquulu l-muʕtazil-at-u
fem-say the-mutazilite-f-nom
The Mutazilites (as a group) say …

In fact, neither the noun form in the DP (sound, broken, or plurative) nor the gender agreement form (feminine singular) can be the sole determinant of the syntax-semantics involved. For example, the feminine singular agreement occurs with sound plural DPs, when they are abstract (in addition to occurring with non-human DPs, or pluratives, as we saw earlier):

(34) hunaaka tanawwuʕ-aat-un kaṯiir-at-un (* kaṯiir-aat-un)
there diversity-fem.pl-nom many-fem-nom (* many-fem.pl-nom)
There are many diversities.

In other words, just as a broken plural DP form does not impose a feminine singular agreement, a sound plural DP form does not impose a sound plural agreement. Moreover, the syntax and semantics of either broken or sound plurals cannot be uniform, but rather constructional.[23]

3.4. The semantics of groups and pluratives

Some theories of groups can account both for their atomic behavior and their sum potential (and/or ambiguity). These theories are extendable to pluratives, once the latter are appropriately situated on the atom/set scale.

3.4.1. Barker (1992)

Barker (1992) argues that groups are of dual nature.
(a) Group as an *atom/individual* denotes an entity that has no internal part structure.
(b) Group as a *set* is at least partially determined by the properties of its members.

The group-atom differs, semantically and syntactically, from both plurals and conjunctions, contrary to the spread view (in Bennett, Link, and Landman, who consider groups to be semantically a piece of plurals and conjunctions; see references there). The analysis is confirmed by:
(a) uses of names of groups as rigid designators,
(b) parallels between group nouns and measure nouns, and
(c) the distribution of groups in dialects of English.
Among these salient syntactic properties are the following:
- groups can be pluralized (committees, armies)
- can be counted (two committees)

[23] See Roman (1990) and Fassi Fehri (2012, 302-303) for examples of sound plurals in a plurative construction. As for the contrasts between the broken-inclusive and the sound-exclusive correlations proposed by Mathieu (*ibid*) and Ouwayda (*ibid*), more investigation is needed to explain such a tendency in interpretation, which to my mind is not systematic.

- can take an *of* phrase containing a plural complement (an army of children, * a child; a table of wood/ *woods); see Barker *ibid*, 70-71, for detail).

3.4.2. Pearson (2011)

Pearson (2011) also distinguishes two classes of groups: "committee groups" (= ComG) and "collection groups" (= ColG). As for ComG, they
(a) license both atomic and plural predication;
(b) permit plural agreement in British English and Canadian English;
(c) exhibit plural-like behavior in partitives.
As for ColG, they
(a) license only atomic predication;
(b) license singular agreement in all English dialects;
(c) behave like atoms in partitives.
The behavior of ComG is accounted for by treating them as denoting predicates of individual concepts (p. 167). The proposal highlights a parallel with kind terms.

In Pearson's terms, it is possible to think of group nouns like *furs* "persians" or *ʕarab* "arabs", or group plurals like *masiiḥiyy-at, buuḏiyyy-at, muʕtazil-at* as sorts of ComG nouns with a double semantic/syntactic behavior, whereas some group nouns *fariiq* "team", *ṣaḥb* "companions", *rakb* "passengers" are only atomic (see detail and more differences in Fassi Fehri 2003, 2012). To illustrate, compare the two collectives: *naas* "people", and *šaʕb* "people". Although both expressions translate as "people" in English, they have different translations in French: "les gens" and "le peuple", respectively. The first collective behaves like a ComG in Pearson's terms, and the second like a ColG, essentially.

A ComG *naas* does not control a masculine singular agreement; it is either 'feminine singular', or 'masculine plural', as the following contrasts illustrate:

(35) a. n-naas-u t-uṣallii
the-people-nom fem-pray
b. n-naas-u y-uṣall-uuna
pray-pl (masc)
b. * n-naas-u yuṣallii
pray (sing)

The same patterns are found for the other members of this class of groups, such as *furs, ʕarab, ruum* "Romans", etc. On the other hand, ColG like *šaʕb* can never be feminine, it is only masculine; moreover, it cannot even be used with a plural masculine:

(36) a. š-šaʕb-u y-uṣallii
the-people 3-pray (sing)
People (French 'le peuple') pray.
b. * š-šaʕb-u t-uṣallii
fem-pray
c.* š-šaʕb-u y-uṣall-uuna
3-pray-pl

The same patterns apply to the other members of this class, such as *fariiq, ṣaḥb, rakb*, or *qawm* "people, nation, folk". Masculine singular is a clear indicator of purely atomic groups.

In addition to the masculine singular property, the atomic group can be pluralized, as in (37), or counted, as in (38):

(37) a. šaʕb “people” → šuʕuub “peoples”
b. qawm “nation, folk” → ʔaqwaam “nations, folks”
(38) a. xamsat-u šuʕuub-in
five-nom peoples-gen
Five peoples
b. xamsat-u ʔaqwaam-in
five-nom nations/folks-gen
Five folks

In these contexts, *šaʕb* is interpreted as group individual, and behaves as if it were a singular particular individual. In contrast, *naas* does not seem to have similar pluralizing or counting properties. The plural form *ʔunaas* is not really a plural of *naas*. It is either its ‘synonym’ (similar to the pair *ʕarab* and *ʔaʕraab*), meaning “people” rather than “peoples”, or it shifts to mean “persons” or “humans” (plural of *ʔinsii*). Likewise, when it is counted, it counts persons, rather than peoples:

(39) ḥaḍara xamsat-u ʔunaas-in
was.present five-nom persons-gen
Five persons were present.

As for its plurative kins, e.g. *buud̲iyy-at*, although it can dualize or pluralize in conjunctions (see (30) for a case of dualization), it does seem to resist both direct pluralization or dualization and counting. At any rate, and to the extent that (40) is acceptable, the numeral or the plural there are applying to taxonomies (or collections), rather than individuals:[24]

(40) ? ʔamaam-a-naa t̲alaat̲-u buud̲iyy-aat
face-us three-nom buddhists-pl
We face three groups of buddhists.

3.5. Structure and the perspectivizing Gen

Granted now that pluratives are not to be treated as purely atomic groups (or ColG), they rather ought to be semantically assimilated to ComG, conceived as collection units (or ‘particulars’ in the perspective of the speaker; see below subsection 5.3). They cannot be treated in syntax like ‘normal’ plurals, since they trigger feminine singular agreement, and do not behave like normal syntactic distributives. In terms of their structure, two options suggest themselves:

(a) Pluratives are ‘numbered’ Gen (Cl);
(b) Pluratives are ‘gendered’ Num.

The two options can be represented as (41a) and (41b), for the construction for (41):

(41) t-udrib-u s-saakin-at-u
fem-strike the-inhabitant-fem-nom
The inhabitants (as a group) strike.

(41a) ClP
/ \
Cl nP
| / \
Grp/Plv *saakin-*
|
-at

[24] It is possible that the non-felicity of combining the plurative with another plural results from conflicting perspectives in using both the plurative (as a ‘grouper’) and the plural (as ‘distributive’).

(41b) NumP
/ \
Num nP
| / \
Grp *saakin-*
|
-at

The two 'hybrid' structures express the dual nature of the head involved. The plurative is not just Gen (or Class), since it cannot be interpreted as 'female', or 'singular'. It is not just any Num, because although it is a plurality (as reflected e.g. by reciprocity and plural predication), it cannot be distributive (nor exclusive or inclusive), and it cannot control normal plural agreement. The two alternative structures mirror the dispute over the 'third gender' in the Africanist literature on whether the plurative is an exponent of Gen (Mous), or of Num (Corbett); see Mous et al. 2014). But to represent the perspectivization role of Gen (on Num), I will adopt tentatively the structure in (41c), in which Gen is higher than (or 'scopes over') Num:

(41c) GroupP (= GenP)
/ \
Group NumP
| / \
-at Pl nP
\ /
saakin-

Here the 'assembling' plurative Gen (as a group), is a counterpart to the 'divisive' singulative, and can dominate a plural.[25]

4. Gender architecture

To account for the various meanings of the feminine (or Gender), I depart from the views in which Gender is confined to a dedicated syntactic position (be it GenP, as in Picallo (2008), or nP as in Kramer (2014), among many others, in which it is interpreted solely as a female/male.[26] Gen is rather distributed over the various layers of the nP/DP, in the spirit of Steriopolo & Wiltschko (2010), Pesetsky (2013), Ritter (1993), among others. Second, Gen has a different content/interpretation, depending on where it is merged in the structure, contra the unique sex (or animacy) view. Gen and its meanings then turn out to be essentially *constructional*, contra lexicalist views. Furthermore, *five* (potentially) *distinct layers* (or sources) of Gen can be postulated (and motivated) in the grammatical nP/DP architecture: (a) conceptual Gen; (b) n Gen; (c) Cl Gen; (d) Num Gen; (e) D/C Gen. This multi-layer view of Gen contrasts with a widespread view in the

[25] Assuming that Gen provides a perspectivization of plurality in the plurative case, as I have suggested earlier, then the structure of (41) cannot be (41a), nor (41b). The more complex structure (41c), in which Gen heads a higher GenP (or GroupP) than NumP, has the merit to stress the fact that perspectivization requires a higher position. This cartographic option can be challenged by taking Gen to be a feature. Such an option is left here for future investigation. Shlonsky (1989) was among earlier precursors of a cartographic decomposition view of phi-features, in which Gender is projected lower than Num, etc.

[26] Among the defenders of the view of gender as a part of the categorizing *n* process, see Kihm (2005), as well as Lowenstamm (2008).

literature which limits the distinction to a duality of so-called 'semantic' vs. 'formal' Gen on *n*.[27]

4.1. Conceptual and n Gender

4.1.1. Nominalized (abstract) nPs

Consider first cases of abstract feminine nouns, compared to their (gendered) bases:

(42) a. ʔab "father" → ʔubuww-at "fatherhood"
b. ʔumm "mother" → ʔumuum-at "motherhood"
c. rajul "man" → rujuul-at "manliness"

(43) a. ʕamm "paternal uncle" → ʕamm-at "paternal aunt" → ʕumuum-at "paternal auntness or uncleness"

(44) xaal "maternal uncle" → xaal-at "maternal aunt" → xuʔuul-at "maternal auntness"

The gender complexity of these forms point to the existence of (at least) two distinct layers of Gen, needed for interpretation: one is *conceptually-based* (i.e. a 'father' is masculine, a 'mother' is feminine, a 'mother uncle or aunt' has two genders, and the same is true for a 'father uncle or aunt').[28] Call the latter 'lower' gender *conceptual Gen*. The upper morphological or grammatical gender (marked by *–at*) forms an *n* (entity or concept) from a property. Call it *n Gen*. The need for conceptual Gen has been pointed out by e.g. Kopke and Zubin (1996), who have argued that "… much of the German grammatical gender is ***conceptually*** motivated in that certain semantic fields tend to be marked by some specific gender [underlining mine; FF]", despite "the widespread view among autonomist grammarians that […] gender in German is most purely grammatical [totally arbitrary] category, not motivated in any way by conceptual factors" (p. 172). Various other motivations have also been more recently brought in by McGinet (2015) for the equivalent 'notional' gender, or by Mithun (2015) for 'cultural' gender, among others.

4.1.2. Various conceptual sources of female/male pairs

Sources of gender may be conceptually or 'culturally' different (even in the same language), and derivations from these sources may lead to various results. Consider the following pairs of feminization:

(45) rajul "man" → mraʔ-at "woman"
(46) qiṭṭ "he-cat" → qiṭṭ-at "she-cat"
(47) mruʔ "man, person" → mraʔ-at "woman"
(48) rajul "man" → rajul-at "a property of a strong woman" (an adjective)

The first pair in (45) is conceptually/semanticallly the minimal pair to express the female/male human, although the two members of the pair do not share any common morpho-phonological base. In contrast, *mraʔ-at* and *mruʔ* in (47) are grammatically and morpho-phonologically related, although they are not the genuine counterpart of 'man' and 'woman' in English; they rather mean "person". As for the (48) pair, it shows that although *rajul* can be made in the feminine, the only available feminine it can form is an adjective, not a noun.

[27] In fact, there may more than five layers if DP and CP are counted separately, or if CP and SAP are taken to be distinct, as explained in section 5 below.

[28] Note that Arabic kinship terms are more specific than those in Germanic and Romance. In Arabic, there is no exact counterpart of a kinship relation like "cousin", "uncle", "aunt", etc. Rather each one of these relationships is situated in Arabic with respect to the mother or the father (e.g. cousin from the mother, or uncle from the father), and each has to be specified as female or male (e.g. female or male cousin), as the examples given and their translations illustrate.

Note that contrary to what happens in the examples (37)-(39) above, where the feminine affix *–at* is a *categorizer*, or part of the categorizing *n* process, the morpheme in the examples (45)-(48) can hardly be taken as a nominalizer. First, the 'masculine' base must be already nominal or adjectival (or coerced to be so) as the contrast between (47) and (48) shows. If this is so, then the base of the derivation may be seen as providing a conceptual ground for forming a feminine (or a masculine) of an entity or a property. If gender is only taken as a feature of the category *n*, and no distinction is made between the contribution of the conceptual and that of the grammatical/functional gender, it is hard to see how such contrasts can be accounted for.

4.1.3. Various conceptual sources of parenthood in MA

In addition to expressing the concepts of 'father' and 'mother' by two phonologically unrelated roots (*bu* "father" and *yemm* "mother", as a strict counterparts of the SA pair in (45)), MA has equivalent expressions which relate to "parenthood", and share a common derivational base, yet every word appears to have its own semantics, which is not transparently compositional at first sight:

(49) a. l-walid 'the parent'; "the father"
b. l-walid-a 'the parent-fem'; "the mother"
c. l-wald-in 'the parent-dual'; "the parents"

But although the two pairs of expressions are roughly equivalent, they are not interchangeable in all contexts. Differences are then traceable to their distinct conceptual sources.

4.1.4. The placement of n Gen

Let assume that the suffix *–at* in (42) is a *categorizer* (n Gen), forming the abstract noun. Let us also take it to be a *head* feature of the functional category *n*, by virtue of contributing to its abstract (rather than concrete) nouniness, in addition to its interpretation as naming a property (rather than an object). Such a 'category change' property is clearer in cases of (abstract) property nouns deriving from adjectives, as has been seen in examples (15a) above, repeated here as (50) for convenience:

(50) suhuul-at-un kabiir-at-un
easy-fem-nom big-fem-nom
A great easiness

I assume that Gen here is interpretable (rather than simply formal), contributing to name an abstract property.

As for Gen in cases like (46), i.e. the normal feminine, it may be in a different position. It cannot be seen as a categorizer, since the derivation operates on what is already taken to be a noun, and the affix does not operate any 'category change' or 'mutation' here. Let us then take it to be a *modifier* feature.

Other cases may be included in the categorizing case. Consider, for example, the following pair:

(51) maktab "office" → maktab-at "library"

Although a (formal) derivational relation can be established between the two members of the pair, the semantics of the second member of the pair is in no way compositional (with respect to the first member). We can account for these properties by postulating that Gen is a categorizing head feature in this case, since its contributes to shaping the content of the noun.

In sum, conceptual Gen in the first member of the pair in (42), i.e. the gender of 'father' (which is presumably interpretable) is lower than Gen *n*. It is found in some low position in the structure, either on roots, or on some functional position lower than 'lexical' categorizers (such as *n, a, v*, etc.).

4.2. Cl Gen and Gen Num

We have seen that there are many sources of the gender assigned to the noun, or of gender agreement, that cannot be confused. Recall the three following cases (among others):
(52) l-qiṭṭ-at-u "the she-cat" (sex)
(53) n-naḥl-at-u "the-bee-indiv" (singulative, individuative)
(54) l-saakin-at-u "the inhabitant-group" (plurative, group)
The first construction instantiates a female derivation, where Gen acts presumably as a modifying feature on n. In (53) and (54), Gen establishes a specific part-whole relation (or a 'mereology'), in the individuative case, or as a 'perspectivization' of the atomistic structure, in the plurative case. Call the gender in (53) a *Cl Gen* (classifier Gen, or Div Gen in Borer's terms), and the gender in (54) *Num Gen* (Number Gen, or # Gen in Borer's terms).

The three instances of gender are all interpretable on the noun phrase, but not in the same way. They can also be displaced on the predicate (be it verbal or adjectival) to provide feminine gender agreement. The two first cases can be pluralized, but (55) cannot be (unless it is found in conjunction):
(55) * l-saakin-aat-u mutanawwiʕ-aat-un
the-inhabitant-group-pl various-fem-pl
Intended to mean: the many inhabitants are diverse.
This ban against pluralization can be understood once gender is taken to be a specific perspectivization of plurality. Informally, the idea is that the plural cannot be made as grouping and distributing (or multiplying) at the same time. The ban appears to recall somehow Borer's complementarity of Div and #, but it is in fact more reasonably justified on discourse grounds, rather than in terms of the pure grammar of Div and #.

Observe that dualization or pluralization by conjunction is not excluded, as exemplified in (30) above, or the following similar construction illustrates:
(56) s-sunn-at-u wa-š-šiiʕ-at-u ittafaq-at-aa ʕalaa nabḏ-i l-ʕunf-i
the-Sunni-fem-nom and-the-Shiite-fem agreed-fem-dual on eradicating the-violence
The Sunnis and the Shiites agreed upon eradicating violence.

4.2.1. Perspectivizing Gen

In most cases, plurative nouns (as well as some collectives) have a double behavior in controlling agreement. They either control (a) a specific plurative agreement (surfacing as 'feminine' 'singular'):
(57) s-sunnat-u t-ufaawiḍ-u š-šiiʕat-a
the-Sunni-fem-nom (as a group) fem-negotiate.with the-Shiites-acc
The Sunnis (as a group) negotiate with the Shiites.
or (b) a 'normal' agreement in number and gender (where number can be plural and gender be masculine):

(58) s-sunnat-u y-ufaawiḍ-uuna š-šiiʕat-a
the-Sunnis-nom negotiate.with-pl the-Shiites-acc
The Sunnis negotiate with the Shiites.

Two forms of agreement then occur on the predicate. The verb is either feminine 'singular' (plausibly without any mark of number), or plural masculine (with values for both gender and number), depending on the interpretation of plurality (as group, or as sum). When the plurality is interpreted as group, the gender of the group overrides the gender of singulars. In non-human plurals (as discussed above for the case of (7)), the same effect is observed, i.e. the gender of the plural overrides that of the singulars. But while polyvalued agreement alternations are found with human pluratives, giving rise to group or sum interpretations, no such option is found with non-human plurals.[29]

The group/sum alternation is dependent on how the speaker views the plurality of the DP, as a group unit, or as a many plural. I assume that this *perspectivzation* of Num is grammatically expressed by a form of Gen, as is implemented in (41c).

4.2.2. The 'hybrid' plurative

As already explained above, the plurative appears to be neither a pure Gen, nor a pure Num (as in the Mous/Corbett dispute), but rather a sort of hybrid complex of both, along the lines indicated. Among its salient properties are the following:

(a) It is not (a low) Gen, as it cannot be interpreted semantically on the scale of sex, although it does formally behave like Gen in controlling feminine agreement.

(b) Unlike the Gen feature in other contexts, the Gen feature here is not compatible with variation in Num values (being invariably in the form of the singular).

(c) Unlike the 'normal' Gen feature in other contexts, the Gen feature here cannot be dropped:

(59) jaaʔa niswat-un mina l-madiinat-I
came women from the-city-gen
Some women from the city came.

(60) qarrar-at š-šiiʕat-u nabḏ-a s-sunnat-i
decided-fem the-shiites eradicating the-sunnis
The Shiites decided to eradicate the Sunnites (group reading).

(61) qarrara š-šiiʕat-u nabḏ-a s-sunnat-i
decided the-shiites eradicating the-sunnites
The Shiites decided to eradicate the Sunnites (no group reading).

Note that the feminine suffix has been dropped in (59), but not in (60), where a group reading is found. In (61), there is no gender agreement, and the only available reading of plurality there is the multiplying or distributive meaning, which is compatible only with normal plural agreement, but not with plurative.

[29] Note that non-human plural agreement, although sharing the form of 'feminine singular' with plurative agreement cannot be confused with the latter. First, there is no group/perspectivization interpretation with non-human plurality. Second, gender can be (optionally) 'dropped' in the VS order, indicating that the plural is 'distributive-multiplying':

(i) rajaʕ-at l-kilaab-u
came.back-fem the-dogs-nom
The dogs came back.

(ii) rajaʕ-a l-kilaab-u
came.back the-dogs-nom
The dogs came back.

These two characteristics illustrate only some differences, and do not exhaust the list.

Finally, *syntactic plurality* is among the most important properties of the plurative. For example, it controls syntactic reciprocals:

(62) š-šiiʕat-u t-antaqidu baʕḍ-a-haa baʕḍ-an
the-shiites fem-criticize some-her some-acc
The Shiites criticize each other.

It is used with plural predicates, unlike singulars:

(63) takattal-at š-šiiʕat-u ḍidd-a daaʕ-iš-a
united-fem the-shiites against Daesh-acc
The Shiites made a coalition against Daesh (ISIS).

Formally, however, the plurative can be treated as a singular. For example, the dual is used in the construction (56) above, to count the two groups.

Furthermore, note that plurative agreement is limited to 3rd person (or non-person). The following sequence from the Quran has a mixture of plurative (third person) agreement and normal personal agreement:

(64) qaal-at l-ʔaʕraab-u ʔaaman-naa qul lam t-uumin-uu
said-fem the-bedouin.Arabs believed-we say not 2-believe-pl
(*ʔaaman-tu 'believed-1'; *t-uumin-ii '2--fem')
The (group of) Bedouin Arabs said: we became believers. They should say: we have not become (so), but [rather] we became muslims.

In this construction, *ʔaʕraab* "Bedouin Arabs" is related to (or 'controls') the plurative agreement on the first verb, the first person plural agreement on the second verb, and the second person plural agreement on the third verb. This variation in agreement features indicates that the 'displaced' features are not *stricto sensu* grammatically anchored (or controlled), but rather depend on illocutionary and deictic properties, and are presumably anchored in D, and/or C.[30]

5. Diminutives, augmentatives, and evaluatives

In this section, I analyze some patterns of modification (through gender) in relation to size (e.g. in the contexts of diminutives or augmentatives), or evaluation (appreciative, depreciative, endearing, etc.). As we will see, the occurrence of gender in a number of these constructions is rather unexpected, and the syntactic location of its controller rather uncommon, being in a highest position in the DP, or a highest position inside or outside the CP.

5.1. Diminutive Gen

Diminutive and augmentative morphemes in Arabic behave mostly as modifiers, denoting either decrease/increase in size, or expressive/evaluative meanings. They occasionally behave as heads (and individualizers), with a portioning out that produces countable units, as has been established for some languages, but only when they are

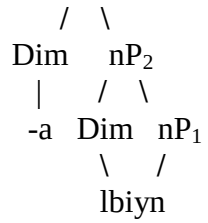
[30] Ouhalla (2013) presents an appealing attempt for implementing a unified treatment of the various patterns of Arabic agreement. Here I am presenting more ramificational differences in Gen treatment. For more on Arabic agreement intricacies, see early work by e.g. Benmamoun (2000), or Mohammad (2000), or even early Fassi Fehri (1988a), which motivates both perspectivization and discourse-oriented control (via Extended Coherence). See also Bresnan & Mchombo (1987) for an early distinction between what they call 'grammatical' and 'anaphoric' agreement.

gendered.[31] It is then the feminine suffix that can be held responsible for this potential meaning, and for forming the category.

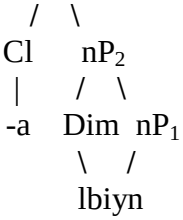
Three different meanings can be distinguished for the *–at* suffix, and represented structurally: (a) ClP (or DivP in Borer's sense), (b) SizeP (DimP or AugmentP, as in Cinque (2014), among others), and (c) EvalP for the evaluative (as a category for endearing, pejorative, among other meanings). The following examples from Moroccan Arabic instantiate the multiple role of Gen in diminutive contexts:
(65) lben "buttermilk' → lbeyy-in 'buttermilk-dimin'; " a small quantity of buttermilk" → lbin-a 'buttermilk-dimin-fem';
a. intensive: " a very small quantity of buttermilk";
b. evaluative: "'buttermilk-dimin'; "an appreciated small quantity of buttermilk";
c. individuative: "a discrete small portion of buttermilk"
(66) sukkar 'sugar' → skiker 'sugar-dim' → skikr-a 'sugar-dim-fem'; all the three readings found for (65) above.

Two distinct structures can be proposed for the intensive (modifier) and the individualizing (head) readings of *lbin-a,* respectively:

(65a) nP_3 (intensive modifier)



(65b) ClP (head individualizer)



5.2. Augmentative Gen

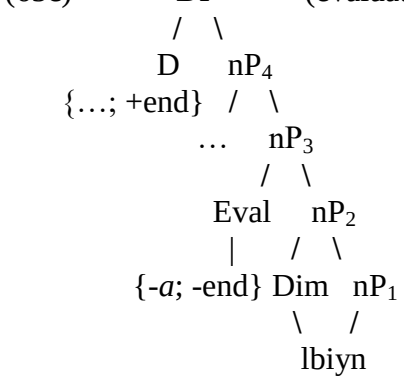
Augmentatives can get intensive and evaluative readings through augmentative morphemes and Gender. I can think of no case where the augmentative is an individualizing head. In (67), a participle adjective undergoes both augmentative and Gender affixation, to yield either an intensive reading or an evaluative reading:
(67) raaḥil "traveler" → raḥḥaal (traveler +augmentative "big traveler") → raḥḥaal-at traveler + augmentative + gender; "exhaustive augmentative; famous big traveler".
The interpretation of (67) appears to fix a limit for the traveling, the *–at* being a sort of delimiter.
The same double process applies to a common noun in MA, producing similar meanings:
(68) bent "girl" → bennuut (girl + augmentative "a big girl") → bennuut-a (girl + augmentative + feminine; a. "a very big girl" b. "a beloved (big) girl").
Likewise, similar results obtain with a proper name, typically as regards evaluation:

[31] See Wiltschko (2006), de Belder (2008), Mathieu (2012), Steriopolo (2013), among others.

(69) ḥmed (simple proper name) → ḥammuud (augmentative "big Hmed") → ḥammud-a (augmentative + gender; "a beloved Hammud")
Gender can also be affixed directly to the adjective, and it expresses (appreciative) intensive, as well as pejorative. The list given here is not exhaustive:
(70) a. naabiġ "clever" → naabiġ-at 'clever-augm', "genius"; raawii "teller"→ rawiiyy-at 'teller-augm', "a big teller; an acknowledged erudite "
b. nammaam-at "a big gossiper"
c. lumaz-at "very critical, cynical"

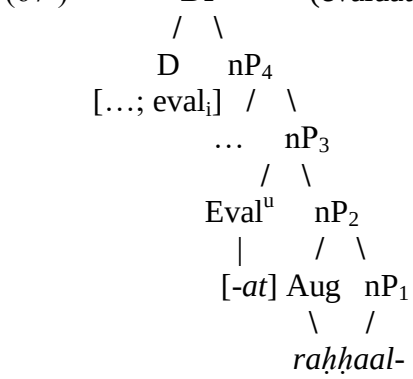
5.3. Evaluative Gen

For the former constructions, I assume that the evaluative (Eval) is placed inside the DP (as a sort of degree phrase), and interpreted in DP, as in (65c):
(65c) (evaluative diminutive modifier)



(end = endearing; - stands for uninterpretable, + for interpretable)
For the sake of simplicity, I will leave aside the details of the granularity of Eval, and the issue whether more cartography in involved there.[32]

As for the 'augmentative evaluative, I assume that Eval here is not different from Eval in the diminutive case, and should be represented in a strictly parallel way to (65c), although the meaning is 'appreciative', 'acknowledged', etc:
(67') (evaluative augmentative modifier)



Note that Eval here is interpreted internally to the DP, just as in the diminutive case. I return to this structure in the next subsection for more detail.[33]

[32] Cinque (*ibid*, Table 1, p.8) proposes a cartographic hierarchization of expressives, as in (i):
(i) augmentative > pejorative > diminutive > endearment
With respect to such a hierarchization, Arabic seems to go in inverse order, given that EndP appears higher than both DimP and AugP. I have no explanation at this point for this reversal. Further research is needed to clarify the nature of such variation.

5.4. 'Performative' expressive Gen

In the previous two subsections, I analyzed cases where the evaluative Gen occurs in (is conditioned by) contexts of Size modification (be it diminutive or augmentative). I turn here to cases where Gen is typically found in contexts where no internal Size implication is involved. These cases are also appealing because they don't exhibit any multiple reading (such as intensive, individuative, or sex). They are rather uniquely devoted to evaluation (or expressivity), with specific structural characteristics. Consider e.g. the following constructions (*end* for endearing):

(71) yaa ʔab-at-i!
oh father-end-mine
Oh my beloved father!

(72) waa ʔumm-at-aa-h!
oh mother-end-his
Oh my (his) beloved mother!

(73) a. yaa wayl-at-i
oh misery/distress-mine
Oh my terrible woe!
b. waa saʕd-at-i! (MA)
oh chance-end-mine
Oh my great chance!

In none of these expressions, can the 'feminine' noun (or morpheme) be associated with a female, a singulative, or an intensive interpretation. The only available interpretation is evaluative (endearment, distress, etc.). What is even more appealing is that these 'feminine' forms do not exist outside these illocutionary marked contexts. There is obviously no 'female father' interpretation available in (71), neither a 'female mother' in (72); there is no 'individuative' involved in (73), and no 'intensive' interpretation anywhere.

It is striking that the existence of this rather original expression and meaning of gender has hardly been acknowledged in the Arabic or orientalist literature, nor did it generate even any preliminary account, as far as I can tell. For example, Wright (1971, II, 87-88) did mention the constructions in (71) and (72) in the context of expressives, but he did not indicate what is the content of *–at* there, seeing them as "peculiar forms"! What he stressed, though, is the fact that the possessive mark (*-iy* or *–y* "mine") has been "shortened" in the vocative. Likewise, Hämeen-Antikka (2000, 601), in her study of Arabic Gender, qualifies the case of (71) as "obscure"! In the early Arabic grammatical tradition, the morpheme *–at* here is seen as essentially fulfilling a morpho-phonological role, replacing the possessive mark (*-y* "mine"), or "compensating" (*taʕwiiḍ*) its absence.[34]

[33] The two evaluative morphemes may in fact be treated differently, as suggested by Cinque's cartography. See the former note. For our purpose here, however, these distinctions are ignored. On the other hand, it is possible that the expressive being 'performative', it is also interpreted in the CP, relative to the speaker's attitude. What is essential, though, is that the interpretation of these expressive morphemes, contrary to the ones we will discuss in the next section, does not depend crucially on the fact that the sentence in which they are embedded must be a performative (or more specifically a vocative).

[34] See e.g. Suyuutii, vol. II, *passim*.

There is evidence that the evaluatives involved in this subsection are rather clause-dependent, or interpreted in the CP (or some level higher), unlike those examined in subsections 5.1 and 5.2. above (which are arguably analyzed as DP internal or dependent). First, contrary to the previous evaluatives, the constructions under investigation do not occur as normal DPs in contexts where the sentence force is not crucial for interpretation, as in e.g. declarative clauses:

(74) a. najaa ʔab-ii mina l- ġaraq-i
escaped father-mine from the-drowning-gen
My father escaped from drowning.
b. *najaa ʔab-at-i mina l-ġaraq-i
escaped father-end-mine from the-drowning-gen
c. *naj-at ʔumm-at-aa-hu mina l-ġaraq-i
escaped mother-end-his from the-drowning-gen

The contrast between the ill-formedness of (74b & c) and the well-formedness of (71) and (72) seems to point to a DP/CP divide in the syntax/semantics of evaluatives. In the latter case, evaluatives can only be interpreted outside the DP, in a position higher in the CP, or even higher than (and outside) the CP, in a clearly performative context (the vocative here). Following a similar metaphoric terminology, I will call the former and the latter constructions *inner* and *outer evaluatives*, respectively.

What are the bases and motivations of such a divide, and how are outer evaluatives anchored in the CP? For the sake of concreteness, let us assume some cartographic representation of the CP a la Cinque/Rizzi/Moro, enriched with a speech act role cartography (SAP) a la Hill (2014), among others. In the expanded CP cartography, vocatives (like those we are concerned with here) tend to be associated with a high functional projection located in the CP, possibly above Force (as in Moro 2003). Hill (*ibid*) proposed that they are rather associated with a SAP projected above (and outside) the CP, in line with Speas & Tenny (2003). Moreover, the structure of vocatives is sensitive to the speaker/hearer hierarchization. Thus, Hill (2014, 207) distinguishes among speech acts between *speaker-oriented clause types* like exclamations (which convey the speaker's point of view about situations), and *hearer-oriented* ones like direct addresses (which convey the speaker's manipulation of the interlocutor). Since the structural placement of the speaker and the hearer is distinct, it is the lower segment of the SAP which is dedicated to (the merger of) the vocative. However, the existence of the upper segment in the SAP of the vocative is not superfluous, because the speaker's field may interact with the hearer's (direct address) field in speaker-oriented vocatives and other vocative contexts.[35]

There is reason to take the gender in the vocative phrase examined to be speaker-oriented, and interpreted in the speaker field. First, the evaluative gender in (71) is exclusively interpreted as a modifier of (the subjectivity of) the speaker. It cannot be associated with the hearer, as the ungrammaticality of (75) indicates:

[35] Following the original proposal of Speas & Tenny (2003). See also Sigurdsson (2004), among others. In view of the "exploded CP" of Rizzi (1997, 2004), Moro (2003) proposed that vocatives are associated with a functional projection located above Force. But according to Hill (2014), vocatives are associated with $\text{RoleP}_{\text{HEARER}}$ in the Speech Act Phrase (SAP), which is projected above the CP, in line with Speas & Tenny (2003). According to Portner (2004), however, vocatives (like subjects of imperatives) are specifiers of a functional head Addr (for 'addressee'), which is projected directly above IP. I assume here a structure a la Hill, and leave for future research more details about the motivation of the cartography used.

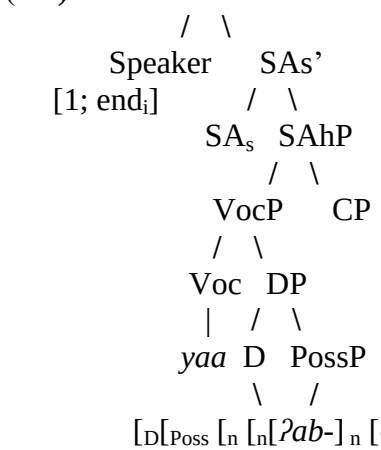
(75) * yaa ʔab-at-a-k!
oh father-end-your
Intended to mean: Oh your beloved father!

What the judgement indicates is that the gender of the vocative phrase can only probe for the higher SA role, the Speaker (which c-commands it), not the lower SA Hearer. Second, note that the gender on the imperative verb (agreeing in second person hearer) is exclusively dedicated to the hearer in the lower segment, as (76) illustrates:[36]

(76) yaa ʔumm-at-aa-h ṭmaʔinn-ii!
oh mother-end-his reassure-fem
Oh beloved mother, be reassured!

Two genders are involved here, the endearing evaluative *–at* on the vocative DP, and the feminine *-ii* on the imperative verb. In both cases, the gender realized can be assumed to be uninterpretable in situ. The lower Gender on the verb is interpretable higher on what is usually understood as a 2nd Person in the imperative (or alternatively on the 2nd Person of the hearer SA role). As for the Gender on the vocative DP, it is neither interpretable internal to the DP, as already established through the (74) contrasts, nor by the lower SA hearer. It is only interpretable higher, in the Speaker 'field' (as part of the Speaker specification and subjectivity). These contrasts give credence to the speaker vs. hearer differentiation in SAPs, as postulated by Hill (2014), among others. I tentatively represent the relevant part of the structure of (71) as follows:

(71')



$[_D[_{Poss}\ [_n\ [_n[\textit{ʔab-}]_n\ [\textit{-at}]_{End^u}]_n\ [\textit{-i}]_{Poss}]_D]]]]$

[36] In this construction, an imperative is embedded inside the vocative. Assuming that the imperative is a CP, the verb which probably moves to C is this case (see Fassi Fehri 2012, 223-226.) agrees (overtly) in Num and Gen with the (hidden) addressee, and only covertly in (2nd) Pers, as in the following simple imperatives:

(i) ṭmaʔinn-ii!
reassure-fem
Be reassured! (for a single female)

(ii) ṭmaʔinn-uu!
reassure-pl
Be reassured! (for a plurality of males)

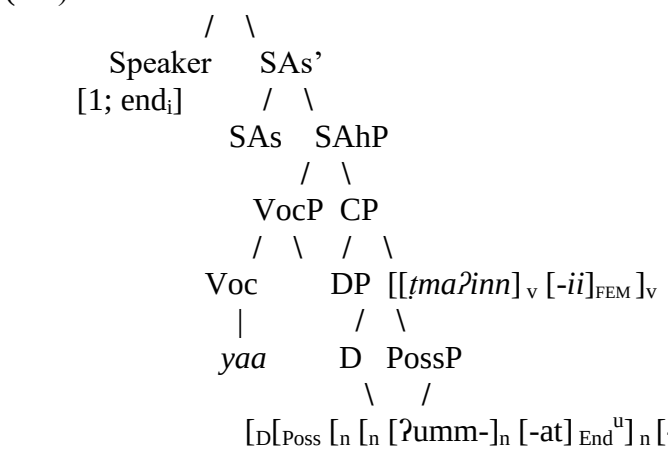
(iii) ṭmaʔin-na!
reassure-fem.pl
Be reassured! (for a plurality of females)

These patterns can be taken as forms of allocutary agreement (as suggested by Shigeru Miyagawa). But note that if this is so, they are not linked to the parametric property of the language being *discourse-configurational*, because Arabic cannot be so qualified. Second, the feature involved is not discursive in the sense that it does vary according to the social status of the speaker or the hearer, their politeness, or their interrelationship, etc. (for illustration of this variation, see Miyagawa (2013), Oyharçabal (1993)). Besides, it is clear that the allocutory agreement described here exhibits distinct properties compared to the 'utterer' agreement (or modification) involved in vocatives or exclamatives.

I assume that the head noun *ʔab* here has moved to D, after having integrated the endearing 'feminine' (modifier), and the cliticized possessor. I assume also that the hidden Speaker has an interpretable 1Pers feature, and an interpretable End feature, which are both targeted in the probe-goal (or indexing) relationship needed for interpretation.

As for (76), its structure is as follows:[37]

(76')



Note that the endearing agreement, as in other evaluatives, involves only coindexation in person (with the speaker or utterer). There is no formal gender agreement in the strict sense here, compared to the agreement found with the singulative or the plurative. For example, there is no gender agreement with the relative marker in (77):

(77) yaa ʔab-at-i llaḏii (*lla-t-ii) raʕaa-n-ii!
oh father-end-mine who.masc (*who.fem) took.care (of) me
Oh my beloved father who took care of me!

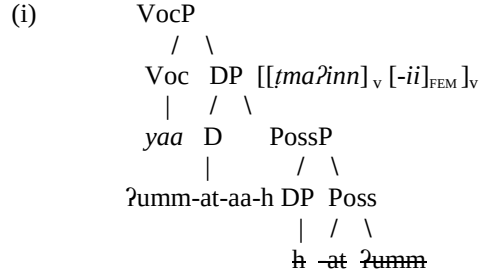
The 'performative' (utterer) agreement (or coindexation) is then limited to the (hidden) speaker value, and has no gender value, suggesting that what is involved here is not a form of phi-agreement, but only a form of coindexation or unification that remains to be made precise in future research.

6. Conclusion

I hope I have shown that Gender is more central and active in the grammar, polysemous, and multi-layerly distributed, not only in the various nP/DP layers, but also upper in the CP, or even higher in the SAP. It employs much more features (like those of individuation, perspectivization of quantity, size, or endearment/distress) than just

[37] In a tree, the VocP has the following basic structure, where the endearing *–at* is adjoined to the head noun *ʔumm*, the possessor third form *h* (which must be interpreted as referring to the speaker) is cliticized to the head noun, and the long vowel –aa (which emphasizes the call) is sandwiched between the modified noun and the possessor:

(i)



those of sex (and/or animacy). A unified integrating treatment of the various interpretable and uninterpretable features of Gender has been proposed, relying on the various features and layers, typically in the model of grammar adopted. This broader and integrating account of Gender has relevant and broad consequences for both the typology and the theory of Gender, as well as other interrelated categories (namely Number), and processes such as Gender agreement (which turns out to be a cover for various types, with different properties).[38] The article has focused on the description of some Arabic varieties, but there is a need, and a potential, no doubt, that the analysis could extend to much more various languages.[39]

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[38] The analysis finds its kin in the treatment of so-called allocutive agreement. In order to account for this phenomenon in Basque, Miyagawa (2012) also postulates a SAP that "dominates the standardly assumed left periphery (LP) of clauses, and which hosts the relevant pragmatic markers and vocative phrases". He assumes that the probe (target) of agreement originates at C (although the formal target is attached to an internal predicate). The probe may then move higher to find as a 2nd person controller (the hearer) in the SAP space, which is located higher than the CP. A similar treatment is applied to relevant patterns of politeness in Japanese (namely through the politeness marker *–mas-*). Note in contrast that the controller/goal dealt with here is the Speaker (or the utterer).

[39] The analysis postulated has been applied here to SA and MA, and can be easily applied to Lebanese, as is transparently clear at least in part in Zabbal (2002-2005) and Ouwayda (2014), as well as other Northern Arabic dialects (Algerian and Tunisian), etc. Kossmann (2014) and Grandi (2015), among others, provide enough ingredients that indicate its easy applicability to Berber. Likewise, Di Garbo (2013) focuses on similar patterns of semantic gender diversity in African languages. See Fassi Fehri (2015) for further application to Hebrew, and Romance.

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