Chapter 9

New roles for Gender: Evidence from Arabic, Semitic, Berber, and Romance

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Contrary to a widespread sex-based typology/theory of Gen(der), where it is essentially construed as (a) a *nominal class marking* device, (b) semantically *sex-based*, and (c) syntactically *reflected in gender agreement* through sexed-animate controllers, I argue instead that Gen is (a) *polysemous*, (b) *multi-layeredly distributed* in the DP, CP, or SAP architecture, and (c) it exhibits a variety of distinct controllers and properties of agreement. Consequently, its grammar, semantics/pragmatics, and representation turn out to be radically different from what is standardly assumed. The analysis is implemented in a minimalist Distributed Morphology model.

1 Introduction

Up until very recently, both typologists and theoretical linguists have entertained a rather simplistic (and exclusive) view of Gender and its role in the grammar, despite its well-acknowledged complexity. Hence back to (at least) Grimm (1822) for Indo-European, or Caspari (1859) for Semitic, a wide-spread typology/theory sees Gen(der) as (a) essentially a nominal class marking device, (b) semantically sex-based (e.g. Corbett 1991; Kibort & Corbett 2008), or animacy-based (Dahl 2000), in addition to (c) being reflected in gender agreement (Kibort & Corbett 2008) with sexed controllers (or goals). But back to Brugmann (1897) for Indo-European, or Brockelmann (1910) for Semitic (among other sources), Gen (and typically the feminine) has been associated with diverse meanings including *individuation*, *collectivity*, *abstractness*, *quantity*, *size*, etc. Old or new grammarians have added even more new meanings and structures, including qualitative *evaluation* ('depreciative', 'affective', 'endearing', etc.), *perspectivization* (of plurality,

'attenuation', etc.), and *speech act role modification* or *performativity* in expressive contexts (as I will show). This polysemy and the differentiated multitude of structures are not expected if Gen is confined to the *n* (and 'lexical') domain, construed as sex, and gender agreement limited to sexed configurations rather than appropriately distributed over various layers of the DP structure, or even the more higher CP and Speech Act role cartography (as in Speas & Tenny 2003; Hill 2014), with productive non-sex interpretations and interrelations.

Overall, the contribution aims at providing a more *integrative* description of the *gender polysemy* than the 'orthodox' sex/animate view can allow for. It is meant to be *constructional*, and hence providing room for more 'unorthodox' syntax (such as that of CP, or the higher SAP). The various *distributed* positions of Gen, and its plausibly related orthodox and unorthodox meanings make Gen potentially and semantically *hyperonymic* (i.e. general enough to embrace more diverse and structurally organized and related meanings found cross-linguistically), and sex/animacy only a *hyponym* (or special) case. Our polysemic treatment and representation is inspired partly by Jurafsky (1996) and Grandi (2015) analysis of evaluative meanings, and it receives further support from work on neural correlates of semantic ambiguity, offering behavioral and neurophysiological support for a single-entry model of polysemy (in contrast to homonymic separate entries), in line with Beretta et al. (2005); Pylkkänen et al. (2006), or Marantz (2005). The article is organized as follows. In §2, I present various instances of the rich semantic diversity of Gender, as illustrated by Standard and Moroccan Arabic varieties. In §3, I investigate the properties of two unorthodox gendered constructions: the *singulative* and the *plurative*, and their forms of agreement alternations. In §4, I motivate the identification of *five layers* of Gen architecture which produce essential interpretations of Gen (including conceptual Gen, and 'performative' Gen). Multiple distinct valued features (including $\pm$ fem, $\pm$ indiv, $\pm$ group, $\pm$ small/big, $\pm$ bad/good, $\pm$ endearing, etc.) are made use of, when interpretable. §5 is dedicated to investigate size and performative evaluation. The latter interpretation is implemented in a Speech Act Cartography à la Speas & Tenny (2003) and Hill (2014). In §6, I turn to more cross- linguistic motivation of the polysemic distributed view of Gen by identifying and investigating some relevant gender patterns in Berber, Hebrew, and Romance. In §7, I discuss the issue of semantics-pragmatics and morpho-syntax interfaces, and the representation of Gen polysemy. §8 provides a conclusion. Throughout the paper, I will be assuming a minimalist distributed-morphology model of grammar based on Chomsky (1995); Halle & Marantz (1993); Marantz (1997); Harley (2014), among others.

2 The many various facets and uses of Gen

2.1 Sex-based and formal Gen

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

(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* monkey-FEM 'she-monkey'
       b. *ḥimaar* donkey 'he-donkey' → *ʔaṯaan* donkey-FEM 'she-donkey'

Note, however, that the morphological feminine tends to replace the 'lexical' counterpart in modern standard usage, as exemplified in (3). In the colloquials, only the regular morphological formation tends to be used in these cases, as exemplified by the Moroccan Arabic pairs in (4):

(3)   Standard Arabic
       a. *qird* monkey 'he-monkey' → *qird-at* monkey-FEM 'she-monkey'
       b. *ḥimaar* donkey 'he-donkey' → *ḥimaar-at* donkey-FEM 'she-donkey'

(4)   Moroccan Arabic
       a. *qard* monkey 'he-monkey' → *qard-a* monkey-FEM 'she-monkey'
       b. *ḥmaar* donkey 'he-donkey' → *ḥmaar-a* donkey-FEM 'she-donkey'

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

(5)   a. *šams* 'sun', FEM (compare with French *soleil*, MASC)
       b. *qamar* 'moon', MASC (cf. French *lune*, FEM)
       c. *nahr* 'river', MASC (cf. French *rivière*, FEM)

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[1]Unless stated otherwise, the examples given are from Standard Arabic.

2.2 Less 'orthodox' meanings

What is more important is the long list of 'unorthodox' gender meanings. I will exemplify only some instances here, with no pretention to be exhaustive.

2.2.1 Singulative

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

(6)   a.   *naḥl* bee 'bees' → *naḥl-at* bee-UNIT 'a bee'

   b.   *štaray-tu samak-at-an   kabiir-at-an*
       bought-I fish-UNIT-ACC big-FEM-ACC
       'I bought a big fish.'

   c.   *štaray-tu samak-an kabiir-an*
       bought-I fish-ACC   big-ACC
       'I bought big fish.'

The suffix *-at* here is known as 'singulative' in the literature. It has been qualified as playing essentially the same role as an individualizing classifier (Greenberg 1972, after the Arabic tradition, back to Sibawayhi 1938; Fassi Fehri 2004; 2012; Mathieu 2012; Zabbal 2002, among others). Typologically in fact, the singulative is closer to a noun Class than to a Classifier, although it fulfils essentially the same role.[2]

2.2.2 Plurative

In plurative expressions (in my terminology), the same gender morpheme *-at* forms a *group* or a collection individual from a singular or a plural of individuals (see Fassi Fehri 1988; 2012):

(7)   a.   *saakin* 'inhabitant' → *saakin-at* 'inhabitants, population'

   b.   *muʕtazil(-ii)* solitary 'a member of the (so-named) theologian thinker group' → *muʕtazil-at* 'the (so-named) theologian thinker group'

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[2]The comparison has been made between Gender, Class, and Classifier by Seifart (2010), as well as Crisma et al. (2011), among others, using distinctive criteria. They both conclude that the Chinese classifier type is singled out as not implicating agreement, in contrast to the other two (in Romance and Bantu), which appear to be closer to Gen manifestations.

    c. *kaafir* 'unbeliever' → *kafar* 'unbelievers' → *kafar-at* 'unbelievers (as a group)'

In the relevant cases, the constructed nP denotes an *integrated whole*, and the morpheme contributes to shape this whole. It can be thought of as a sort of classifier (or a "grouper"). I return later on to its exact contribution. Note that the plurative, like the singulative, controllers feminine singular agreement, as illustrated by the following construction:

(8)   *s-saakin-at-u*   *ḥtajj-at*
       the-inhabitant-FEM-NOM protested-FEM

       'The inhabitants (as a group) protested.'

2.2.3 Gendered augmentative

Augmentatives are internally formed first, then *-at* can be affixed to them. The affix then functions as intensive or evaluative:

(9)   *raaḥil* 'travelling, traveller' → *raḥḥaal* 'a big traveller'
     → *raḥḥaal-at* 'traveller + augmentative + FEM'

    a. intensive: 'an extremely big traveller'

    b. evaluative: 'an acknowledged big traveller'

2.2.4 Gendered diminutive

When a diminutive is internally formed, and the morpheme *-at* is suffixed to it, it expresses 'intensive' decrease in size, affectivity, or eventually a 'unit reading', as is exemplified by the various meanings of (10):

(10) *zayt* 'oil' → *zuwayt* oil.DIM 'small quantity of oil' → *zuwayt-at* oil.DIM-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'

2.2.5 Gendered event units

An event nominal acting as a cognate object can express a *kind event*, as in (11a), where it denotes that one or more dances have been performed, or a countable *event unit* (or instance) as in (11b):

(11) 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.'

The formation of event units here parallels that of concrete nouns formed in (6); see Fassi Fehri (2005; 2012) for detail.

2.2.6 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:

(12) a. *suhuul-at-un   kabiir-at-un*
          easy-FEM-NOM big-FEM-NOM

          'A great easiness.'

      b. *ʕuruub-at* 'arabity'; *zunuuj-at* 'negritude'

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 well, as in French *facile* 'easy' → *facilité* 'easy-ness'.

2.3 A new picture

In Indo-European studies, Brugmann (1897) observed that the same marker is employed for collectives, abstractions, and the feminine, which suggests questioning the "sexual content" of the feminine, rather than "feminizing" collectives and abstractions. Leiss (1994) reformulated Brugmann's insight in terms of *perspectivization*, in the sense that the function of gender is to provide a "different perspective to represent a multitude of entities" (203).[3]

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[3]Perspective, construal, point of view, or subjectivity have been used as terms to designate the speaker's perception of the entity involved. 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 (see also Hachimi 2007). I adopt the perspectivization view of Gen below, and provide a representation of its place in the DP.

In the Arabic grammatical and philological tradition, regular descriptions of Gen connect feminine, collectives, abstractions, plurals, intensives, etc. I derive these connections through the architecture of quantity (#, as in Borer 2005), sex ($\pm$ fem), and size ($\pm$ big / small). Evaluation is especially included in the Arabic tradition for the diminutive, and only marginally for the augmentative.[4]

3 Singulativity and plurativity

3.1 Singulativity

3.1.1 Essential properties

Fassi Fehri (2016) provides a list of the most salient properties of the singulative:

1. It is a process by which a collective (and less frequently a mass noun) is turned into a single individual or unit.

2. It is commonly marked via Gender (or the feminine) cross-linguistically (Arabic, Berber, Breton, Welsh, Somali, Hebrew, Russian, etc.; see e.g. Mathieu 2013).

3. It triggers feminine singular agreement on its target.

4. It has the interpretation of a singularity (not that of an 'inclusive' or 'week' plural, as in (14c) below).

5. It can be dualized, pluralized, or counted by numerals.

In (13), the feminine appears to individualize a mass noun:

(13)   a. *xašab* 'wood' (mass) → *xašab-at* 'piece of wood'
       b. *šamʕ* 'wax' (mass) → *šamʕ-at* wax-UNIT 'a candle'

In (14a), the singulative is singular, in (14b), it is dual; but in (14c), the general noun is rather interpreted as 'weak plural' (i.e. as singular or plural):

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[4]Regarding Western sources, I refer to Ibrahim (1973) for an early synopsis of the traditions of thoughts, Hachimi (2007) for a good overview of the patterns and issues involved, in addition to Fleisch (1961); Roman (1990), and Wright (1971; originally written in German by Caspari (1859), with many Arabic sources included).

(14) a. *ʔakal-tu tamr-at-an*
      ate-I   date-UNIT-ACC
      'I ate a date.'

     b. *ʔakal-tu tamr-at-ayn*
        ate-I   date-UNIT-DUAL.ACC
        'I ate two dates.'

     c. *ʔakal-tu tamr-an*
       ate-I   date-ACC
       'I ate (one or more) dates.'

By contrast, the plural of the singulative in (15) can only be 'strong' or 'exclusive' (which means that only more than one date can be involved):

(15) *ʔakal-tu tamar-aat-in*
     ate-I   date-UNIT.PLURAL-ACC
     'I ate (many) dates.'

3.1.2 Structure

We can see from (14) and (15) that there is no complementary distribution between the individualizer (Div or Cl) and Num (#), the dual, or the multiplying plural. I postulate (16) as a structure of (15), in which the singulative (Cl) and the plural (Num) co-occur:[5]

(16)   NumP (#P)

       Num/#   Cl/DivP

         Pl   Div   n

        aa   *at*   *tamr*   (*tamar-aat*)

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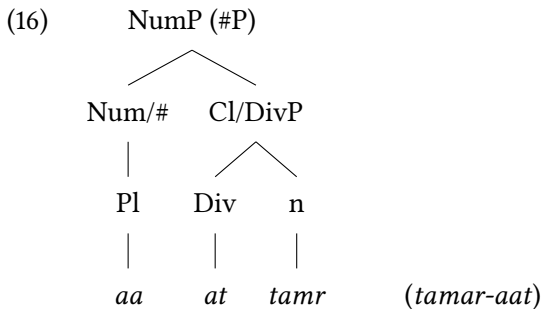
[5]Ouwayda (2014), although arguing that Num and Gen are separate categories in this sound plural construction, maintains the view that the plural here is a mere agreement marker (with a hidden numeral). But there is enough evidence to reject this complementarity view. See Fassi Fehri (2012; 2016) for detail.

3.2 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 the Africanist literature (see e.g. Dimmendaal 1983, or Mous 2008), basically seeing it as the opposite process of the singulative. Discussing Hayward's (1984) observation that in the Cushitic language Arbore, many nouns have a general form (which is non- specified as to the singular/plural distinction), although they can be pluralized, as in:

(17)   *kér* 'dog(s)' → *ker-ó* 'dogs'

Corbett (2000: 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)".

Compared to the singulative, the plurative appears to be taking an opposite path to be derived, as schematized in (18):

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

In the Africanist literature, the plurative appears to be a process by which a strong or distributive plural is derived from a base which is a general noun (see Mous 2008). The exact Arabic counterpart of such a process would then be the plural of a collective, which is rather exclusive. The following derivation illustrates such a process:

(19)   a.   *samak* 'fish' (collective) → *ʔasmaak* 'many fish' (plurative)
          b.   *štaray-tu ʔasmaak-an mulawwan-at-an*
                bought-I fish.PL-ACC coloured-FEM-ACC
                'I bought (many) coloured fish.'
          c.   *štaray-tu samak-an mulawwan-an*
                bought-I fish-ACC   coloured-ACC
                'I bought (one or more) coloured fish.'

Compared to (19c), which can be felicitous even if only one fish is bought, (19b) cannot be so interpreted, and the number of fish must be more than one, comparable to the interpretation of the strong interpretation associated with the plural

of the singulative in (15) above. But because (19b) might be seen as pluralizing a weak plural (the so-called general noun), it is often thought to be a 'double plural'; although the plural of the singulative cannot be so conceived (see Fassi Fehri 2012 for detail).

According to Mous (2012, p.c.), the most important property of the Cushitic plurative is that it triggers a 'third gender' agreement, which takes the form of a plural. But note that the Arabic plurative, as I construe it, is not the plural of the collective, as in Cushitic, but rather the closest counterpart to the singulative. Both control a 'feminine' (singulative) agreement, and the plurative is also forming a unit, or a group. Like the singulative, the Arabic plurative can be seen as closer to noun Class and Gender, unlike the Cushitic plurative, which may be, if it is really a 'gender', as Mous put it, closer to the gender found with Arabic non-human plurals.[6]

3.2.1 Essential properties

The most salient properties of the plurative include the following:

1. The plurative derivation is a process by which a collective, a singular, or a plural nP is turned into a group unit (or a collection unit).

2. It is morphologically marked by the same feminine suffix, on the controller and/or the target.

3. Syntactically, it takes part in feminine singular agreement.

4. When the plurative marked nP participates in (or controls) normal plural agreement, it 'looses' its group meaning.

5. Semantically, it expresses a plurality, or more precisely a 'perspective' on plurality. It controls reciprocity, or plural predication, etc.

6. The plurative is potentially countable, and can undergo dualization or pluralization in relevant contexts (see Fassi Fehri 2016 for detail).

7. The plurative is in complementary distribution with both Number and other Gen (including the singulative).

The group or collection unit is formed from various classes of nouns, only few of which are exemplified here.

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[6]See Fassi Fehri (2016) for examples of non-human plurals controlling feminine singular agreement. My proposal for the Cushitic plurative is only speculative at this stage, as it is still very poorly understood.

3.2.2 Professional groups, corporations, property sharing, or collections units

Standard Arabic uses -*at*, and Moroccan Arabic −*a* as exponents:

(20) Standard Arabic
      najjaar 'carpenter' → *najjaar-at* 'the corps of carpenters'

(21) Moroccan Arabic
      šeffaar 'thief' → *šeffaar-a* 'thieves (as a group)'

(22) Moroccan Arabic
      jebl-ii mountain-sing 'an inhabitant of the mountain' → *jbal-a* 'inhabitants of the mountain'

Groups based on property sharing are normally derived from adjectives or participles:

(23) a. *kaafir* 'unbeliever' → *kafar-at* 'unbelievers (as a group)'
      b. *saaḥir* 'magician' → *saḥar-at* 'magicians (as a group)'

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

(24) a. *al-fursu   wa-r-rum-u   štarak-at-aa   fii ḥarb-in*
          the-Persians and-the-Romans participated-FEM-DUAL in war-GEN
          ḍidda   l-ʕarabi
          against the-Arabs
          'Persians and Romans participated together (as a group) in a war against Arabs.'

      b. *al-fursu   wa-r-rumu   štarakuu   fii ḥarb-in*
          the-Persians and-the-Romans participated-PL.MASC in war-GEN
          ḍidda   l-ʕarabi
          against the-Arabs
          'Persians and Romans participated together in a war against Arabs.'

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

(25) *al-muʕtazil-at-u   wa-l-ʔašʕariyy-at-u   tawaḥḥad-at-aa   fii*
      the-Mutazilite-FEM-NOM and-the-Asharite-FEM-NOM unified-FEM-DUAL in
      haaḏaa
      this
      'Mutazilites and Asharites have unified (their view) on this.'

The dualization of the plurative suggests that pluratives are potentially countable.

Note that simple collective nouns, plurative nPs/DPs can either trigger a plurative agreement, as in (8) above, or 'normal' plural agreement as in (26):

(26) *s-saakinat-u   ḥtajj-uu*
      the-inhabitant-ꜰᴇᴍ protested-ᴘʟ.ᴍᴀꜱᴄ

      'The inhabitants protested.'

This 'hybridity' in agreement points to a duality in behavior of the plurative DP, being denoting either a group, as in (8), or a sum, as in (26); see Fassi Fehri (2012; 2016) for detail.

3.2.3 The "hybrid" plurative

The plurative then 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:

(a) It is not (a low) Gen, since it cannot be interpreted semantically on the scale of sex;

(b) Unlike Gen in other contexts, the plurative Gen feature is not compatible with variation in Num values (being invariably in the form of the feminine singular), as illustrated by the contrast in interpretation above.

Another important property is that the plurative is a *syntactic plurality*, rather than a singularity. For example, it controls syntactic reciprocity:

(27) *š-šiiʕ-at-u   t-antaqidu   baʕḍ-a-haa baʕḍ-an*
      the-Shiite-ꜰᴇᴍ-ɴᴏᴍ ꜰᴇᴍ-criticize some-her   some-ᴀᴄᴄ-ʜᴇʀ

      'The Shiites criticize each other.'

It is used with plural predicates, unlike singulars:

(28) *takaṯṯal-at š-šiiʕatu   ḍidda   daaiš-a*
      united-ꜰᴇᴍ the-Shiites against Daesh-ᴀᴄᴄ

   'The Shiites made a coalition against ISIS.'

But note also that the hybridity of the plurative comes from the fact that it can be treated as a singular. For example, the dual used in the construction (25) above counts the two groups.

Finally, with respect to its semantics, the hybridity of the plurative is confirmed by the fact that it shares the semantics of groups (or "collective" nouns),

as described e.g. by Barker (1992), typically their twofold potential of being atoms/individuals or sums/sets, as reflected by agreement alternations. See also Pearson (2011). But its hybridity is even stronger than normal group since it appears to be both a plurality (at some low layer) and a singularity (at a higher layer), as reflected by its structure given below in (29); see Fassi Fehri (2016) for more detail and references.

3.3 Structure of the "perspectivizing" Gen

Various options for the structure of pluratives are explored there, but shown to be inadequate. The following structure is motivated by various considerations, taking into account the fact that pluratives are collection units formed in syntax (or "particulars" in the perspective of the speaker), rather than normal plurals (or simple atomic groups). For the sake of illustration, I propose then that the structure of the DP in (8) is as in (29):

(29)   GroupP (= GenP)

      Group   NumP

       -at   Pl   nP

            ~~*-at*~~ *saakin-*
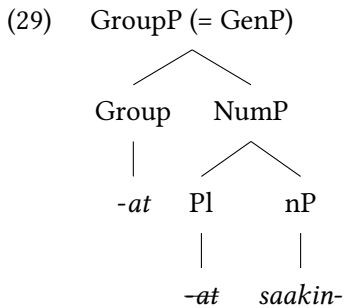
    The structure represents the view that a plurative is formed as a plural of a specific sort first, then *perspectivized* as a unit (or group) through Gen, assuming that it is Gen which provides the perspectivization of plurality, then Gen (or Group) is placed higher, to "scope over" Plural, or Num.[7]

4 Gender layers and architecture

To account for the various meanings of the feminine (or Gender), I depart from the view that Gen is confined to a dedicated syntactic position, be it GenP (as in Picallo 2008), or nP (as in Kihm 2005, Lowenstamm 2008, or Kramer 2014, among

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[7]For concreteness sake, I assume that *-at* is placed first in the Num position, and then moves higher to Group/Gen. N also moves there, and then higher to D as in the usual N-to-D movement (see Longobardi 2001; Fassi Fehri 1993).

others), and it is interpreted as basically male/female (Percus 2011). Gen is rather distributed over the various layers of the nP/DP, in the spirit of Steriopolo & Wiltschko (2010); Pesetsky (2013), or Ritter (1993), and even higher in the CP, or SAP. Gen and its meanings then turn out to be essentially *constructional*, contra lexicalist or natural views. Furthermore, at least *five distinct layers* (or sources) of Gen are 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, or even higher, SAP Gen.

4.1 Conceptual and n Gender

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

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

(31) a. *ʕamm* 'paternal uncle' → *ʕamm-at* 'paternal aunt' → *ʕumuum-at* 'paternal auntness or uncleness'
      b. *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 'maternal uncle or aunt' has two genders, and the same is true for a 'paternal uncle or aunt').[8] Call this "lower" gender *conceptual Gen.* The second grammatical upper 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. Köpcke et al. (2010), 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 [italics mine; FF]", despite "the widespread view among autonomist grammarians that [...] gender in German is most purely grammatical [totally arbitrary] category,

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[8]Note that Arabic kinship terms are more specific than those of Germanic or Romance, in that there is no such a "vague" kinship relationship like 'cousin', 'uncle', 'aunt', etc. Rather, each of these relationships in Arabic must indicate whether it connects to the mother or the father (e.g. cousin from the mother, or aunt from the father), as the examples and their translations illustrate.

not motivated in any way by conceptual factors" (172). Various other motivations have also been more recently brought in by McConnell-Ginet (2015) for the equivalent "notional" gender, or Mithun (2015) for "cultural" gender, among others.

4.1.1 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:

(32) *rajul* 'man' → *mraʔ-at* 'woman'

(33) *qiṭṭ* 'he-cat' → *qiṭṭ-at* 'she-cat'

(34) *mruʔ* 'man, male person' → *mraʔ-at* 'woman'

(35) *rajul* 'man' → *rajul-at* 'a property of a strong woman' (an adjective)

The first pair in (32) is conceptually/semantically the minimal pair to name the female/male human pair, although the members of the pair do not share any common morpho-phonological base. In contrast, *mraʔ-at* and *mruʔ* in (34) are grammatically and morpho-phonologically related, although they are not the genuine counterparts of 'man' and 'woman' in English; the first member means 'male person' rather than 'man'. As for the (35) pair, it shows that although *rajul* can be made feminine, the only feminine it can form is a manner adjective, not a noun.

Note that contrary to what happens in the examples (30a & 30b) above, where the feminine affix *-at* can be taken as a *categorizer*, or part of the categorizing *n* process, the morpheme in the examples (32–34) can hardly be taken as a nominalizer. First, the 'masculine' base is already nominal or adjectival (or coerced to be so) as the contrast between (34) and (35) suggests. If this is so, then the base of the derivation may be seen as providing a conceptual ground for forming a feminine (or 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 (or root) gender and that of the functional gender, it is hard to see how such contrasts can be accounted for.

4.1.2 The placement of n Gen

Let assume that the suffix *-at* in (30) is a *categorizer* (n Gen), forming the abstract noun. Let us also take it to be a *head* feature of the category *n*, by virtue of contributing to its abstract (rather than concrete) nouniness, in addition to is

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 (12) above. I assume that Gen there is interpretable, contributing to name an abstract property.

As for Gen in cases like (33), it may be in a different position. It is not a head categorizer, since the derivation operates on what is already a noun, and the affix does not operate any "category change" or "mutation" here. It is rather a *modifier* feature.

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

(36)   *maktab* 'office' → *maktab-at* 'library'

Although a (formal) derivational relation can be established between the two nouns, the semantics of the second member 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.

4.2 Cl Gen and Num Gen

The singulative/individuative Gen investigated above instantiates a classifier/-Class gender, as explained there. The plurative gender, on the other hand, instantiates the case of Number that is "gendered", or Num Gen, as an expression of perspectivization, as explained earlier.

5 Size and evaluative modification

5.1 Diminuitive Gen

Diminutive and augmentative Arabic morphemes 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 gendered in Arabic.[9] It is then the feminine suffix that can be held responsible for this potential meaning.

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

Three different meanings of the morpheme can then be distinguished, and represented structurally: (a) ClP (or DivP in Borer's sense), (b) SizeP (DimP or AugmentP, as in Cinque 2014), and (c) EvalP for the evaluative (endearing, pejorative, etc.). The following example from Moroccan Arabic instantiates the multiple role of diminutive Gen:

(37) Moroccan Arabic
      lben 'buttermilk' → *lbeyy-in* buttermilk-DIM 'a small quantity of buttermilk' → *lbin-a* buttermilk.DIM-FEM

  a. intensive: 'a very small quantity of buttermilk'

  b. evaluative: 'an appreciated small quantity of buttermilk'

  c. individuative: 'a discrete small portion of buttermilk'

Two distinct structures can be proposed for the intensive (modifier) and the individualizing (head) readings of *lbin-a*, respectively:[10]

(38)   nP₃   (intensive modifier)

        Intens   nP₂

          | Dim   nP₁

         -a | /
                  lbiyn

---
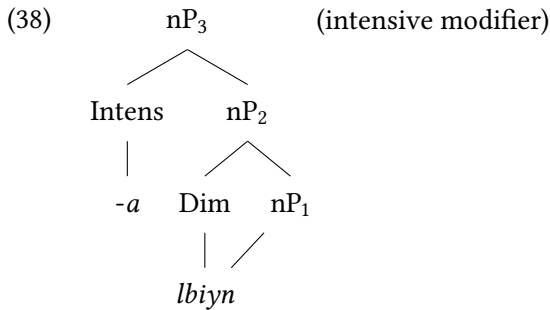
[10]A reviewer wonders whether there are two morphemes involved here (*-i* as diminutive, and *−a* as feminine), or just one 'feminine' *-a*, which can be used as diminutive. The first option is motivated by the fact that the two morphologies distribute separately, the diminutive being regularly internal to the stem, whereas the evaluative is regularly external to the stem. The realizations of the diminutive as *-y-* or *-i-* are morpho-phonologically conditioned, being a glide or a short vowel, depending on whether the syllable is open or closed. Moreover, there is no independent evidence that the two morphemes are fused.

(39)   ClP   (head individualizer)

```
        ClP
       /    \
     Cl     nP₂
     |      /  \
    -a    Dim   nP₁
          |  /
        lbiyn
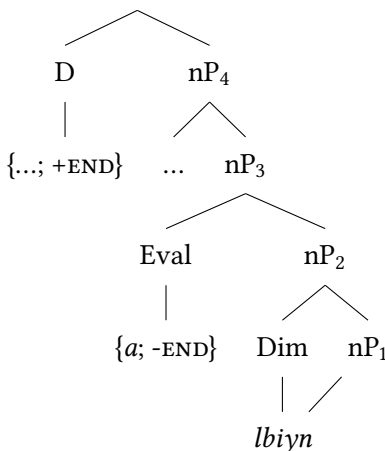```
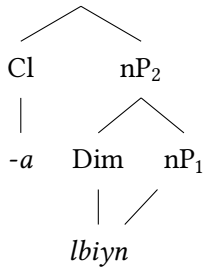
## 5.2  Augmentative Gen

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 (40), a participle adjective undergoes both augmentative and Gender affixation, to yield either an intensive reading or an evaluative:

(40)   *raaḥil* 'traveler' → *raḥḥaal* (traveler + augmentative) 'big traveler' → *raḥḥaal-at* traveler + augmentative + FEM 'famous big traveler'

## 5.3  Evaluative Gen

In the "appreciative" diminutive in (37), I assume that Eval is placed inside the DP (as a sort of degree phrase), and interpreted in DP:
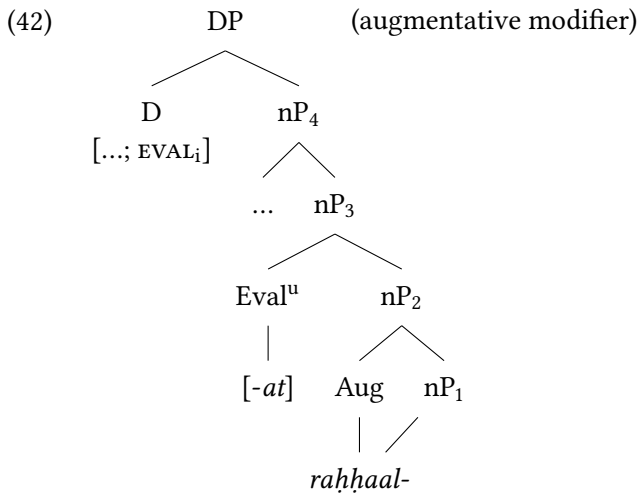
(41)        DP          (diminutive modifier)

```
             DP
           /    \
          D      nP₄
          |     /   \
     {...; +END}  ...  nP₃
                      /    \
                   Eval    nP₂
                    |      /  \
               {a; -END}  Dim   nP₁
                          |  /
                        lbiyn
```

(END = endearing; - for uninterpretable, + for interpretable)

For the sake of simplicity, I leave aside the details of the granularity of Eval, and the issue of whether more cartography needs to be involved here.[11]

As for the augmentative evaluative in (40), I assume that its Eval here is similar to the diminutive Eval, and should be represented in a strictly parallel way, inside DP:

(42)   DP   (augmentative modifier)

D nP_4
[…; EVAL$_i$]

        … nP_3

            Eval^u nP_2

            [-*at*]   Aug nP_1

                raḥḥaal-

5.4 'Performative' expressive Gen

Previous evaluative Gen occurred in contexts where a quantitative size modification can obtain, with an internal DP source. I turn here to cases where Gen lacks both such a quantitative option, and internal DP interpretive source. These cases are unique, in that they are devoted to qualitative evaluation or expressivity, with specific external characteristics.

Consider e.g. the following constructions (END for endearing):[12]

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[11]Cinque (2014: 8; Table 1) proposes a cartographic hierarchization of expressives, as in (i):

   (i)   augmentative > pejorative > diminuitive > endearment

   With respect to such a hierarchization, Arabic seems to go in inverse order, given that EndP appears higher than both 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.

[12]Note that the third person pronoun −*h* is used here for the speaker (or 'first' person), as is usually the case in some European language styles.

(43)   *yaa ʔab-at-i!*
        oh   father-END-mine
        'Oh my beloved father!'

(44)   *waa ʔumm-at-aa-h!*
        oh   mother-END-EXCLAM-his
        'Oh my beloved mother!'

(45)   a. *yaa wayl-at-i!*
            oh   misery-distress-mine
            'Oh my terrible woe!'

        b. Moroccan Arabic
            waa saʕd-at-i!
            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. There is obviously no 'female father' interpretation in (43), neither a 'female mother' in (44); there is no 'individuative' involved in (45), and no 'intensive' anywhere. The only available "meaning" here is an expression of the speaker's emotional feelings (endearment, distress, etc.). What is even more appealing is that these 'feminine' forms cannot be used outside these illocutionary marked contexts. It is also striking that the existence of this rather original expression and meaning of gender has hardly been acknowledged in the Arabic or orientalist literature, and it did not generate any preliminary account, as far as I can tell.[13]

There is evidence that these evaluatives are clause-dependent, or interpreted in the CP (or some level higher), unlike those examined above (which are DP 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:

(46)   a. *najaa   ʔab-ii   mina l-ġaraq-i*
            escaped father-mine from the-drowning-GEN
            'My father escaped from drowning.'

---

[13]Wright (1971: II, 87–88) did mention the constructions in (43) and (44) in the context of expressives, but he did not indicate what is the content of *-at* there, describing them as 'peculiar forms'! Likewise, Hämeen-Anttila (2000: 601) qualifies the case of (43) as 'obscure'! In the early Arabic grammatical tradition, the morpheme *-at* is seen as fulfilling a morpho-phonological role, i.e. "replacing" the possessive mark (*-y* 'mine'), or "compensating" (*taʕwii*) its absence.

b. * *najaa   ʔab-at-i   mina l-ġaraq-i*
   escaped father-END-mine from the-drowning-GEN

c. * *najat   ʔumm-at-aa-hu   mina l-ġaraq-i*
   escaped mother-END-EXCLAM-his from the-drowning-GEN

The contrast between the ill-formedness of (46b & 46c) and the well-formedness of (43) and (44) 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 and outside the CP, in a clearly performative context (the vocative here).

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 Speech Act role cartography (SAP) a la Hill (2014), among others. In the expanded CP cartography, vocatives tend to be associated with a high functional projection located in the CP, possibly above Force (as in Moro 2003). Hill proposed that they be 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.[14]

There are reasons to take the gender in the vocative phrase examined to be speaker-oriented, and interpreted in the speaker field. First, the evaluative gender in (43) is exclusively interpreted as a modifier of (the subjectivity of) the speaker. It cannot be associated with the hearer, as the ungrammaticality of (47) indicates:[15]

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[14]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. See Hill (2014) for detail, and relevant references cited there.

[15]A reviewer wonders what is the status of a parallel of (44) in this case, i.e. the following construction:

(i) * *yaa ʔumm-at-aa-k!*
    oh   mother-END-EXCLAM-your
    Intended: 'Oh your beloved mother!'

Its ungrammaticality indicates that the same observations can be extended to 'mother' as well (or, in fact, to any other relational noun).

(47)   * *yaa ʔab-at-aa-k!*
     oh father-END-EXCLAM-your
     Intended: 'Oh your beloved father!'

What the judgement indicates is that the gender of VocP 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 with the second person hearer) is exclusively dedicated to the hearer in the lower segment (which also c-commands it), as the following construction illustrates:[16]
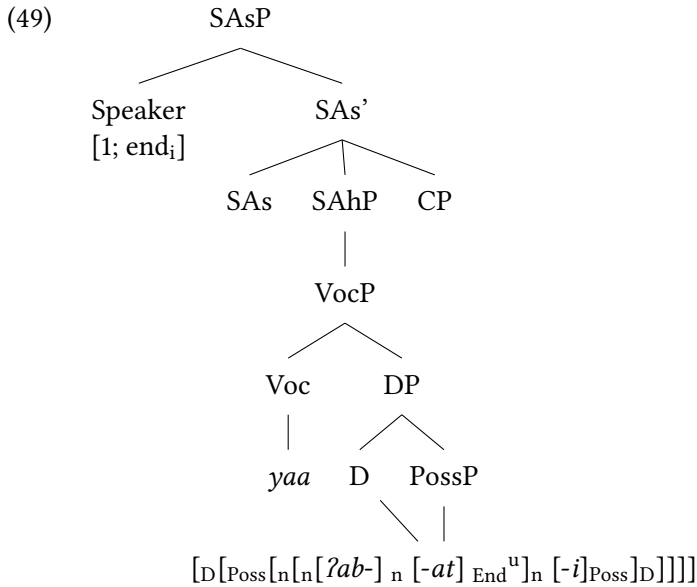
(48)   *yaa ʔumm-at-aa-hu*   *ṭmaʔinn-ii!*
     oh mother-END-EXCLAM-his reassure-FEM
     'Oh beloved mother, be reassured!'

Two genders are involved here, the endearing evaluative *-at* on the vocative DP expression, and the feminine *-ii* on the imperative verb. In both cases, the gender realized can be assumed to be "displaced", or uninterpretable in situ. The lower gender on the verb is interpretable higher, its goal being the 2nd Person of the SA hearer. As for Gen on the vocative DP, it is neither interpretable in the DP, as already established through the (46) contrasts, nor by the lower SA hearer. It is only interpretable higher in the SA cartography, in the speaker "field" (as part of the speaker 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 (43) as follows (s for speaker, h for hearer):

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[16]In the embedded imperative inside the vocative, the verb agrees in Num and Gen with the (hidden) addressee, and only covertly in 2nd Pers:
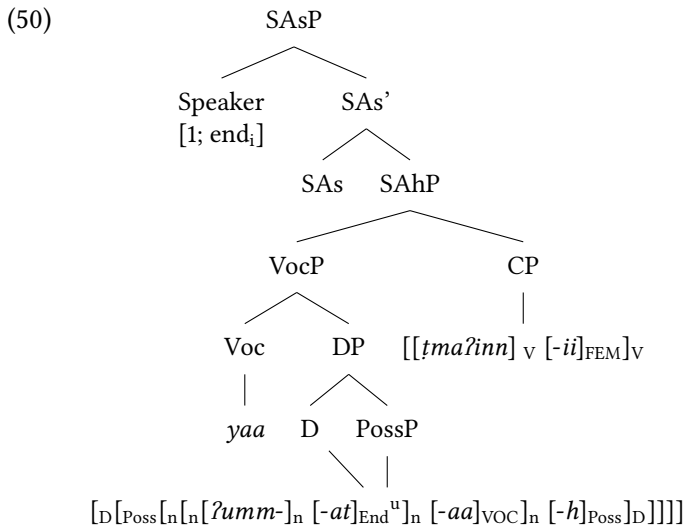
    (i)   *ṭmaʔinn-ii!*
         reassure-FEM
         'Be reassured!' (for a single female)

    (ii) *ṭmaʔinn-uu!*
         reassure-PL
         'Be reassured!' (for a plurality of males)

These patterns can be taken as forms of allocutary agreement (as in Miyagawa 2012). See Fassi Fehri (2016) for other details.

(49)

SAsP
Speaker [1; end$_i$]
SAs'
SAs SAhP CP
VocP
Voc DP
yaa D PossP

$[_D[_{Poss}[_n[_n[\text{?}ab\text{-}]_n [\text{-}at]_{End}{}^u]_n [\text{-}i]_{Poss}]_D]]]]$

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

As for (48), its structure is as follows:

(50)

SAsP
Speaker [1; end$_i$]
SAs'
SAs SAhP
VocP CP
Voc DP $[[\text{ț}ma\text{?}inn]_V [\text{-}ii]_{FEM}]_V$
yaa D PossP

$[_D[_{Poss}[_n[_n[\text{?}umm\text{-}]_n [\text{-}at]_{End}{}^u]_n [\text{-}aa]_{VOC}]_n [\text{-}h]_{Poss}]_D]]]]$

Note that the endearing agreement involves only coindexation in person (for the speaker or utterer). There is no formal gender agreement here, compared to the agreement found with the singulative or the plurative (see Fassi Fehri 2016 for detail).

6 Cross-linguistic extensions

This section does not intend to describe the vast number of gendered languages that instantiate similar patterns and correlations, but only give some examples for the sake of identification and comparison. The list includes Berber (Afroasiatic), Hebrew (Semitic), and Romance.

6.1 Berber

Berber has a two-gender opposition, expressing natural gender, abstracts, units, size, expressive evaluation, and it interacts with "enunciation" (Mettouchi 1999). The morpheme *-t* (occurring as a reduplicating discontinuous morpheme, or "circumfix") provides the formal means to express these various meanings which compete for the same slot on the noun, without any possibility of being added to each other (being in "complementary distribution"; Kossmann 2014), while the augmentative is expressed via a form of (uncommon) "substractive" morphology (Grandi 2015). In the descriptions provided, there are systematic relationships between gender forms and meaning forms, e.g. between feminine and diminutive, or between masculine and augmentative. There are also expressions of endearment, contempt, "in relation to the speaker", etc.

First, *-t* expresses *sex* for animates:

(51) Kabyle (Mettouchi 1999)
    a. *agyul* 'donkey' → *t-agyul-t* 'she-donkey'
    b. *aganduz* 'veal' → *t-aganduz* 'heifer'

(52) Ayt Seghrouchen (Kossmann 2014)
    a. *arba* 'male child' → *t-arba-t* 'female child'
    b. *afrux* 'boy' → *t-afrux-t* 'girl'
    c. *afunas* 'ox' → *t-afunas-t* 'cow'

Second, *unity* nouns are formed by the feminine:

(53)   a. *nnamus* 'mosquitoes' → *ṯanamusṯ* 'a single mosquito'
        b. *l-mašmaš* 'apricots' → *ṯamšmašṯ* 'a single apricot'

Third, a *quantitative diminutive* is expressed by the feminine:

(54)   a. *afus* 'hand' → *ṯ-fus-tt* 'little hand'; variant: *afus* → *ṯ-afus-t*
        b. *ṯ-aherdan-t* 'small lizard' (also 'female lizard')
        c. *ṯ-aslem-t* 'small fish' (Kossmann 2014; Grandi 2015)
        d. *lkursi* 'chair' → *ṯakursitt* 'little chair'
        e. *muka* 'owl' → *ṯamukatt* 'little owl' (Kossmann 2014)

Fourth, *abstract* nouns can be formed as feminine, expressing qualities, professions, names of languages, etc.:

(55)   a. *aryaz* (m) 'man' → *ṯaryazṯ* 'manliness (courage)'
        b. *aslmaṯi* (m) 'fisherman' → *ṯaslmaṯiṯ* (f) 'profession of fisherman'
        c. *ašəlḥi* 'Berber' → *ṯašəlḥiṯ* 'Berber language' (Kossmann 2014)

As for *augmentative*, it is said to be expressed by the 'masculine':

(56)   a. *ṯ-a-bhir-t* 'garden' → *a-bhir* 'big garden'
        b. *ṯamṣaṭṭ* 'thigh' → *amṣaḍ* 'very big thigh' (Kossmann 2014)
        c. *amuka* 'big owl'

Abdel-Massih (1971) observes that "certain feminine nouns give augmentatives by a process that is the reverse of diminutive formation", and hence, only feminine nouns can be augmentativized (-*t* if present is then 'deleted', in "a typologically unusual instance of subtractive morphology", as Grandi (2015: 10). As for masculine nouns, they can only be diminutivized. A triplet of normal, singulative, and augmentative are given in the following example:

(57)   *lḥumṣ* 'chickpeas' → *ṯaḥumṣtt* 'one chickpea' → *aḥumṣ* 'big individual chickpea'

As for *evaluative* endearment and contempt, Mettouchi (1999: 219) observes that "both diminutives and augmentatives can be reinterpreted as depreciative", or else appreciative. Hence it is apparently possible to depreciate/appreciate from the masculine to the feminine, or vice versa, as in (58) and (59), respectively:

(58)   *argaz* 'man' → *t-argaz-t* 'mannish female'

(59) *tamtut* 'woman' → *amtu* 'a wimp woman'

Endearment is also expressed via the diminutive feminine, as in (60):

(60) *baba* (m) 'my father' → *ṯababatt* (f) 'little father; endeared father' (Kossmann 2014; second translation mine)

As for the *expressive performative* (in my terms), I have found what appears to be one of instantiation of it in an example brought up by Kossmann (2014), where the feminine establishes a relation (of low age), in relation to the speaker:

(61) *ʕəmm-i* 'my paternal uncle' → *ṯ-aʕəmmi-tt* 'paternal uncle (younger than the speaker)'

6.2 Hebrew

Early Semitic had a common feminine marker *-at*, which was found before it split into East and West Semitic (Hasselbach 2014, and references cited there). When compared to Akkadian, Classical Arabic, and Géez, Hebrew appears to have a short list of meanings. The feminine suffix *-a* appears to be the most productive, compared to other morphemes (including *-t* or its variants *-et*, *-at*, *ot*, etc.). Here are some patterns of semantic diversity.

Female sex can be expressed by *-a* or *-it*:

(62) a. *more* 'teacher' → *more-a* 'female teacher'
      b. *kélev* 'dog' → *kalv-a* 'she-dog'

(63) *tanah* 'cook' → *tanah-it* 'female cook'

The feminine can mark abstracts:

(64) *neqam-a* 'vengeance'

It forms singulatives:

(65) *oni* 'fleet' → *oniyy-a* 'a ship'

The 'collective' can be marked by the feminine, and the unit singular unmarked, just as is the case in the Arabic plurative:[17]

(66) a. *daag* 'a fish' → *dagg-a* 'fish (as a collection)'
      b. *yoseb-et* 'inhabitants as a group; population'

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[17]See Hasselbach (ibid.), among others, and relevant references cited there.

6.3 Romance

De la Grasserie (1904) notes that gender as a sex appears only very late in the historical grammatical hierarchical strata associated with gender, in fact the last one. But languages like Bantu has non-hierarchical multiple genders. In a second stage from this state, there is development of a hierarchical animate/inamimate opposition, rather than sex. In a third stage, sex is allotted to nouns, even without reason, although construed by subjectivity, and interlocution (De la Grasserie 1904: 226–227). It is then 'big/small', 'important/less important', 'strong/weak' etc., or rather an opposition of 'wide, vague, or generic' (for the feminine) and 'specific, precise' for the masculine. There is also a tendency to feminize nouns in languages that have no neuter, "which is in the middle".

As an illustration, Kahane & Kahane (1949: 135) observe that "… in the Romance languages the *feminine* form of a noun may have an *augmentative* value in relation to the corresponding masculine", e.g. *sacca* 'large sack', compared to *saccu* 'sack'. The augmentative use of the feminine is further illustrated in a number of Italian dialect constructions, including the following examples Kahane & Kahane (1949: 138):

(67)   a.   *kavana* 'big basket' (*kavan* 'basket')
       b.   *kortella* 'large kitchen knife' (*kortello* 'knife')
       c.   *pavela* 'large butterfly' (*pavel* 'small butterfly')

By gender change, diminutive or intensive are also expressed (Kahane & Kahane 1949: 139–141):

(68)   a.   *padellina* 'small frying pan' → *padellino* 'very small frying pan'
       b.   *trombettina* 'small trumpet' → *trombettino* 'very small trumpet'
       c.   *barchina* 'small bark' → *barchino* 'tiny hunting boat'
       d.   *cassetta* 'drawer' → *cassetto* 'small drawer'

In a similar vein, Bergen (1980) argues that there are various semantic uses of gender in (dialects of) Spanish, including natural sex, unitization, small or large size, etc., built on the feminine suffix *-a* (Bergen 1980: 49–50; 53; 56):

(69)   a.   *gato* 'cat' → *gat-a* 'female cat' (sex)
       b.   *Rafael* → *Rafael-a* (female proper name)

(70)   *aceituno* 'olive tree' → *aceituna* 'olive'

(71)   *barco* → *barca* 'small ship' (diminuitive)

(72)   *panero* → *panera* 'large basket' (augmentative)

In sum, a gender polysemy can be established across languages, which corroborates the Arabic picture, and which supports the multi-layered approach adopted here.[18]

7 Semantics-pragmatics, morpho-syntax, and representation

Having established that the Gender functional affix is polysemous, and that its morpho-syntax is distributed (rather than unique), I first discuss some preliminary proposals made in the literature to account for regular polysemy and sense extensions of similar morpho-syntax and semantics. I then postulate a single representation of the various senses of the affix.

7.1 Semantics, discourse, and interface with morpho-syntactic peculiarities

Grandi (2015), building on previous work by Dressler and Jurafsky in particular, argue for various semantic and pragmatic interpretations formally dependent on the peculiarities of language-specific evaluative word-formation strategies (including affixation, gender shift, compounding, reduplication, etc.). Cross-linguistically, evaluative constructions can express either (a) descriptive/quantitative or (b) qualitative/expressive evaluation. In the case of (a), the description relies on real/objective properties (of objects, persons, actions, etc.), which are measured with respect to a standard/default value, and seen as a deviation with respect to the norm (culturally or socially determined). In the case of (b), the evaluative and subjective is concerned with personal feelings or opinions. For example, *cagnolino* in Italian can objectively describe a small dog, and *cagnone* a big one, in relation to a standardly sized one, using objective dimensional parameters. But if someone calls his Great Dane *cagnolino*, she/he would be expressing her/his affection towards it, or feelings, which depend crucially on pragmatics or discourse factors. The semantic-formal correlation is often unpredictable, but there are numerous instances of regular morphological qualitative evaluation (e.g. Slovak *mam-isko* 'mother-AUG' expresses a pejorative, whereas *mam-ička* 'mother-DIM' expresses an affectionate evaluative). See also Cinque (2014).

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[18]See Fassi Fehri (2016) for more extensions to German, Dutch, Spanish, and more relevant references.

Wierzbicka (1989) proposes to consider the evaluative functions as instantiations of typological or universal prototypes, based on semantic primitives: the quantitative SMALL/BIG, and the qualitative GOOD/BAD. Jurafsky (1996) offers an in-depth view of the polysemy of diminutives and their semantic complexities via a "radial model" (inspired by Lakoff's 1987 radial category). According to him, the central (semantic) category of the diminutive is CHILD. Other diminutive senses come about through a process of *semantic change,* which uses various important mechanisms, including the *creation of metaphors*, *bleaching*, and the *conventionalization of inference.* Finally, in Körtvélyessy's 2014 model of evaluative formation, the semantic pragmatic functions of quantitative and qualitative evaluation are reflected in the form of two alternative paths of evaluative formation. The semantics of evaluation takes evaluative constructions as part of a continuum of QUANTITY (under or above) the default value, or a 'supercategory' including other categories.[19]

7.2 A unique hierarchical representation of Gen polysemy

In a polysemic analysis of Gen, its multi-layered distributed architecture and its distributed morphology model concur to provide an integrative view of regularities, correlations, and patterns found in Arabic varieties, and other languages as well. The variety of meanings and morpho-syntactic features or categories are interrelated and often regularly interfaced, rather than being accidental. As regard meanings, it is possible to see Gen as a semantic 'supercategory' or *hyperonym* of Quantity (or Quality), with a hierarchization (or a tree geometry), in which a *hyponym* Gen would be sex, taking into account historical stages of gender evolutions, various gender origins, as well as language-specific semantic and formal gender uses. Providing such a global and integrative model of Gen is far beyond the scope of this work, although such a model is possible to construct, typically based on empirical formal-semantic/pragmatic regular correlations. By correlating a unique (feminine) Gen morpheme to these various meanings and layers, we avoid an unmotivated exclusion of numerous meanings and configurations in which Gen is found.[20]

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[19]According to her, the categories subsumed include Plurality or Aktionsart, with concepts of multiplicity, iterativity, distributiveness, attenuation, etc., which are of quantitative nature. See Körtvélyessy (2014) for detail, and the relevant references there.

[20]The Distributed morphology model is precisely designed to represent such complex and hierarchical semantic and morpho-syntactic mappings. Properties of traditional lexical terms are actually distributed across separate lists in the model, each of which is relevant only to a subset of functions of the traditional lexicon. Syntactic primitives (functional or contentful) are ± interpretable feature bundles, and Vocabulary Items pronounce terminal nodes in context only late in the derivation (given their "Late insertion" property). See Halle & Marantz (1993); Harley (2014), among others, for details.

Given that Gen is neither mono-semic (but rather having the potential to express many senses), nor mono-functional (not being limited e.g. to 'referential-tracking', but also expressing perspectivization of referents or shifts, expressiveness, or illocutionary/speech act modification), an associated semantics/pragmatics of Gender based on its alleged "natural" sex/animacy appears to be highly inappropriate. By contrast, our minimalist/distributed treatment is designed to take into account both its polysemy (with no homonymic alternative) and its polyfunctionality, in a motivated constructional and integrative approach.

Building on various contributions in the literature to account for regular polysemy, or sense extensions, and its representation or generation, I assume a single geometric representation in which Gen can be (distributively) *hyperonymic*, embracing the diverse and structurally organized and related meanings or functions found cross-linguistically, the sex (or animate) meaning being only a *hyponym*. This view builds on insightful relevant work by Dressler & Barbaresi (1994); Jurafsky (1996); Körtvélyessy (2014); Grandi & Körtvélyessy (2015) with regard to the semantic treatment of evaluatives, Lakoff's (1987) "radial" categorization, as well as work on neural correlates of semantic ambiguity, offering behavioral and neurophysiological support for a single-entry model of polysemy, in line with Beretta et al. (2005); Marantz (2005); Pylkkänen et al. (2006).

8 Conclusion

I have shown that Gender is more central and active in the nP/DP architecture, as well as in the (upper and parallel) CP structure or higher SAP than has been thought so far. It is found in multiple layers of the grammar, and it employs much more semantic features. An integrative treatment of its polysemy and its distributed syntax has been proposed. This multi-layered integrated 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 also turns out to be a cover for various types, with different properties).

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