# (Grammatical) gender troubles and the gender of pronouns[1]

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**ABSTRACT**

This chapter argues that grammatical gender is hosted on the nominalizing head, whereas semantic gender is hosted in a higher head, one that is also responsible for animacy. The claim is not new but here it is supported by looking at two classes of evidence from the behavior of empty nouns in strong pronouns and pronominal clitics and from a phenomenon of 'transgendering' in Brazilian Portuguese and Modern Greek. it is argued that pronominal clitics are not necessarily animate exactly because they lack the structural layer where semantic gender is encoded and that if the semantic gender layer is coerced to take an *n*P as a complement, the resulting referent will always be animate.

**KEYWORDS**

Gender, nominalizer, pronoun, clitic, empty noun, transgendering, Greek, Brazilian Portuguese

## 1. Background

This chapter proposes an approach to the syntax of gender cross-linguistically, according to which the two kinds of gender that we find, i.e. *semantic* gender, which is interpretable, and *grammatical* gender, which is uninterpretable, are features present on different functional heads in the nominal projection line, with semantic Gender features situated higher.

The received knowledge is that φ-features are Person, Number and Gender features. Person features are about discourse participants (Halle 1997, 429 – and much subsequent work); Number features are about individuation and/or plurality (Ritter 1991; Borer 2005). So, both Person and Number features are clearly interpretable; moreover, in cases where the contribution of e.g. Number features is not compositional (e.g. in so-called lexical plurals

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like *brains* meaning 'wit' or 'intelligence') there are principled explanations for them (Acquaviva 2008). What about Gender features? Surely, mothers are feminine and he-goats are masculine in language after language, but answers in German and tables in Romance are feminine, whereas walls in Greek and the German moon are masculine.

The fact that gender is sometimes interpretable sets it apart from structural Case, which is never so (Chomsky 1995, 2001). By 'interpretable' we mean interpretable at LF: a feature readable by the Conceptual-Intentional systems – as a sex-defining category, in this case. Moreover, the partial interpretability of gender sets it apart from inflectional (both nominal declension and verbal conjugation) class features, which only define morphology-internal classes. In a nutshell, gender does define nominal classes but this is not the only thing it does because it occasionally signifies the sex of the kind the noun denotes.

At a pre-theoretical level, we can base ourselves on detailed surveys like Corbett (1991) and observe that sex(-based) Gender features play three disparate roles:

1. They classify (or even *create*) lexical nouns; this classification is generally arbitrary, but not completely so;
2. they unambiguously mark sex on a) *some* animate nouns, and b) on *some* pronouns;
3. they mark dependencies within DPs via concord; this makes them *a bit like Case*, a matter that is often overlooked.

As far as their classifying function is concerned, Gender features may appear to behave like the elusive inflectional class features that define nominal declensions in languages like Old English and Russian. If this were an accurate parallelism, then we could perhaps suggest Gender features are uninterpretable and even account for them in the manner of Alexiadou & Müller (2007), who analyse class features as sets of uninterpretable features that get mutually cancelled out in the course of the derivation via checking. However, this is not an accurate parallelism and Gender features have occasionally a crucial role to play in interpretation. This takes us to the second of the functions listed above, namely the semantic character of gender.

In a number of instances, Gender features actually mark natural gender (i.e. sex, in sex-based gender systems) and animacy. When they do so, such 'semantic' Gender features typically reflect a cognitively salient property of the concept expressed by the *n*P: they are hence interpretable. Now, if we wish to frame the interpretability of semantic gender in structural terms, we could perhaps argue together with Lowenstamm (2008) that

(1) Semantic or 'natural' Gender features are located on $n$.

In other words, we can perhaps claim that semantic gender is introduced by the nominalizer $n$, i.e. the syntactic head that turns acategorial roots into nouns (Marantz 1997; Harley and Noyer 1998a; Marantz 2006; Lowenstamm 2008; Panagiotidis 2011). If this were indeed the case, then the long-standing intuition that gender is an intrinsic feature of nouns, as opposed to a feature of – say – Determiners, is captured: semantic gender can be found on (some) nouns because it is a feature of the nominalizer, not of the acategorial root. This would also tie in very nicely with the account according to which gender on pronouns is located on $e_N$, an empty noun (Panagiotidis 2002, chap. 1, 2003b). Finally, this state of affairs could be recaptured à la Harley (2005a), where empty nouns are understood as bare $n$ heads, nominalizers without a root complement (Panagiotidis 2011).

More generally, the fact that natural gender and animacy are marked, often morphologically, on the noun itself, is not without theoretical interest: colour and weight, among others, are also cognitively very salient properties but do not form the basis of noun classification ("gender") systems. This is a point worth probing into within the framework of biolinguistic research. However, there is a more pressing issue at hand, namely that semantic gender does *not* seem to be encoded on $n$. This is a problem to which we will return later.

With respect to the third function of gender listed above, i.e. gender marking dependencies via concord (cf. Carstens 2000), little has been said. Unlike Number agreement, which involves an Agree relation between an uninterpretable / unvalued feature on D or on adjectives and an interpretable feature on Num, gender concord does not necessarily go that way, given that uninterpretable gender can be located on nouns without it feasibly being matched by interpretable Gender features anywhere in the nominal phrase. Thus, feminine gender on the Greek noun *krisi* ('crisis') below can hardly be claimed to be interpretable, under the assumption adopted above that semantic gender is interpretable, and no source of interpretable gender can be argued to exist inside the nominal phrase, either.

(2) afti        i        nea        krisi

     this.FEM   the.FEM   new.FEM    crisis.FEM

     'This new crisis."

It goes without saying that there is nothing remotely interpretable about a feminine feature on an inanimate abstract noun like *crisis*.

### 2. *Grammatical versus semantic gender*

The consistent disparity between semantic gender and grammatical gender is dealt with in Kramer (2009), where

(3) Semantic gender is understood as interpretable and grammatical gender as uninterpretable.

Accordingly, there are two possible sets of Gender features: semantic Gender features, which are interpretable, like [fem] on the Spanish noun *madre* ('mother'), and grammatical Gender features, which are uninterpretable, like [fem] on the Spanish noun *mesa* ('table'). As far as the issue with concord in cases like (2) is concerned, Kramer claims that concord will occur with grammatical Gender features in the absence of semantic gender features. So, according to Kramer, concord will first target semantic Gender features and – if these are not there – will then target grammatical Gender features. So, according to Kramer (2009),

(4) Semantic gender > grammatical gender.[2]

This is a result anticipated in Déchaine (this volume); it is already independently arrived at in Merchant (2014, 18–19) regarding animate nouns and it falls out of his examination of ellipsis facts in Modern Greek: Merchant explicitly argues for a semantic gender head c-commanding animate nouns. In a similar vein, Atkinson (2015) closely examines complex scenarios involving gender concord conflicts in French.[3] She subsequently provides a way to resolve such conflicts, as schematically rendered in (4), by positioning semantic Gender features on a head *higher* than the locus of grammatical gender, *n* and the root respectively. If concord is a more or less run-of-the-mill Agree operation (as per Carstens 2000), then the Probe, say an unvalued Gender feature on the article, will search down in the derivation for a suitable Goal. If a semantic Gender feature, a potential Goal, is absent, then a grammatical Gender feature lends itself for the purposes of concord, becoming a Goal for Agree.

(5) a. [uGen]$_{PROBE}$ … [$i$Gen] $_{GOAL}$ … [$u$Gen]     Agree with semantic gender

   b. [$u$Gen]$_{PROBE}$ … [$u$Gen]$_{GOAL}$         Agree with grammatical gender

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[2] Kramer (2015) rethinks the distinction between semantic and grammatical gender as follows: both semantic and grammatical Gender features are located on *n*, with semantic gender encoded as interpretable Gender features and grammatical gender encoded as uninterpretable Gender features.

[3] The situation is much more nuanced, as discussed in Ihsane & Sleeman (2016).

According to (5) above, and keeping in mind the more or less inevitable assumption in (3), the dependency-marking function of gender concord can have different sources:

(6)

Semantic (interpretable) gender *or*

Grammatical (uninterpretable) gender

The hypothesis in (4) that semantic gender is higher than grammatical gender feels rather counterintuitive; actually, our first reaction to it would be that we would expect the reverse state of affairs to hold. In other words, along with Lowenstamm (2008), we would prefer that semantic gender of – say – *mother* (or the French equivalent *mère*) be part of the "lexical entry", as opposed to something hosted in a head higher than the one bearing grammatical gender. In order to illustrate why this is an issue that would make us feel awkward, let us consider the case of the German word for 'girl', i.e. *Mädchen*. The semantic gender is feminine, whereas the grammatical one is neuter; even before we examine concord facts in this language, we are inclined to think of feminine, the semantic gender, as 'closer' to the noun, if not an essential ingredient of the noun's meaning.

Suppose, along with Lowenstamm (2008) and others (Ferrari-Bridgers 2008; Kihm 2008; Acquaviva 2009; Kramer 2009) that gender is a feature of the nominalising head *n*. Adopting a syntactic approach to categorization (Marantz 1997, 2000, 2006), the main lexical categories 'noun' and 'verb' can be syntactically decomposed: lexical categories such as 'noun', 'verb' and 'adjective' are not products of the combination of categorial features with roots in a pre-syntactic lexicon. Instead, roots are inserted bare in syntax, where the assignment of roots to categories takes place as a process of embedding the latter within categorising projections: thus, categorization is a *syntactic process*. Categorization is hence achieved by embedding roots inside the complement of *categorizers* – a nominalizer (*n*), a verbalizer (*v*) and an adjectivizer (*a*). In our case, simple nouns are *structures* composed of a nominalizer *n* and an acategorial root. The empirical consequences of syntactic categorization have been explored in detail in a significant body of work, including – but not restricted to – Harley and Noyer (1998a, 1998b), Embick (2000), Alexiadou (2001), Folli, Harley and Karimi (2003), Arad (2003, 2005), Folli and Harley (2005), Harley (2005a), (2005b), (2007) and (2009), Embick and Marantz (2008), Lowenstamm (2008), Basilico (2008), Volpe (2009), Acquaviva (2009) and, in a slightly different framework but in considerable detail, Borer (2005), (2009) and De Belder (2011).

Now, if gender is indeed a feature on the nominalizer *n*, which gender is it? Semantic or grammatical? If *n* is what makes nouns, we would expect *semantic* Gender features to be encoded on it – recall our take on the gender of *Mädchen* above. In this chapter it will be shown both that this hunch, i.e. that semantic gender should be borne by *n*, is a residue of lexicalist thinking and that it can be empirically defeated if we look

   a. at DPs with empty nouns
   b. at what we can informally call "linguistic transgendering" in Brazilian Portuguese and in Greek.


### 3. Gender and empty nouns

In order to shed some light on where Gender features are encoded, perhaps we can begin from an untypical but privileged vantage point, namely from nouns that have no descriptive content:

   (7) What kind of gender is encoded on empty nouns?

Empty nouns (Panagiotidis 2002, 2003a), or semi-lexical nouns, are lexical nouns that do not carry any descriptive content, including English *one* (as in *the right one*) and phonologically null nouns.[4] There are three characteristics of empty nouns that are of interest here:

   I.  Empty nouns, conceived as elementary N heads in Panagiotidis (2002, 2003a), can be readily analysed as *at least* an *n* head without a root complement (Harley 2005a; Panagiotidis 2011).

   II. As Emonds (1985, 159–68) claims and Panagiotidis (2003a) discusses in detail, different lexical entries of grammatical nouns and grammatical verbs can be distinguished from each other by virtue of *their formal features only*, as they are completely devoid of any descriptive content. This is very important because it entails that there are as many entries for empty nouns as the number of formal feature combinations available for N (i.e. for *n*). Needless to say, Gender features make a prime candidate for the type of formal feature whose values may distinguish between different entries for empty nouns.

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[4] Emonds (1985, chap. 4) already analyses semi-lexical elements – which he calls grammatical nouns and grammatical verbs – as instances of N and V heads without any descriptive, concept-denoting features. This line of analysing semi-lexical heads is taken up and developed in van Riemsdijk (1998), Haider (2001), Schütze (2001) and Panagiotidis (2003a).

III. Empty nouns, phonologically null or not, are the nouns inside the projection lines of all pronominal DPs and of DPs with some types of nominal ellipsis (Postal 1969; Cardinaletti 1994; Lobeck 1995; Cardinaletti and Starke 1999; Corver and Delfitto 1999; Panagiotidis 2002; Merchant 2014).

The last characteristic is particularly important, because gender in the context of pronouns is far more than just a classificatory or a dependency-establishing category: Gender features on pronouns actually restrict their reference, as discussed in Heim (2008) – see also Merchant (2014). In a simple case like *she*, the reference of the pronoun is restricted roughly as follows:

(8) she is happy

$\exists!x$, feminine(x) $\wedge$ happy(x)

So, one could rush to think that the feminine feature above plays a role 'semanticky' enough so as to qualify for an interpretable feature. In other words, one could perhaps answer the question in (7) above along the lines of 'gender on empty pronouns is semantic'. Indeed, the good news is that in (8) and similar cases, i.e. in so-called strong pronouns (Cardinaletti & Starke 1999), gender as a restrictor is indeed *semantic* gender: in general, *he* is male, *she* is female and *it* neither and/or inanimate.[5] So, we can safely say that in (8), the Gender feature on the empty noun in the pronominal structure of *she* is semantic, i.e. interpretable. However, things change once we look at pronominals beyond English and beyond strong pronouns. To wit, in French pronominal clitics Gender features also act as restrictors of reference. However, these are now *grammatical* gender features:

(9) je la vois (*la = Hélène, la table, la dure condition*…)

I CL.FEM see (Helen, the table, the tough condition)

The feature 'feminine' no longer restricts the referent as female. On the contrary it imposes a *language-internal* restriction to the reference of the pronominal clitic *la*, namely that it be referred to by a nominal phrase headed by a noun bearing feminine gender, whether this be semantic (as in *Hélène*) or grammatical (as in the other two examples: a concrete object and an abstract situation). Crudely put:

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[5] Ships in English are female because they are conceptualized as such; interpretable features index conceptual constructs, not physical reality. I wish to thank a reviewer for raising this matter.

(10)        For gender restriction to work

in strong pronouns you need to know something about the world;

in clitics you need to know "the lexicon".

This state of affairs is challenging but possibly enlightening. It is challenging because it suggests that one of the differences between strong pronouns and clitics, regarding animacy (Cardinaletti & Starke 1999), can be reduced to the kind of gender encoded on clitic and strong pronouns: grammatical vs. semantic respectively. So, strong pronouns encode semantic gender and animacy, clitic (and weak) pronouns encode grammatical gender.[6]
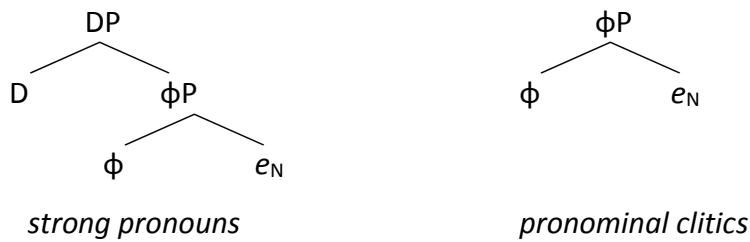
Still, why is the state of affairs in 0 enlightening? Recall that according to Panagiotidis (2002) *all* types of pronominals contain an $e_N$, an empty noun; furthermore, after Harley (2005a) this empty noun is actually a bare nominalizer *n* without a root complement, an analysis that is fleshed out in Panagiotidis (2014, sec. 4.5). At the same time, Déchaine & Wiltschko (2002) have argued in detail that different pronominals are made up from functional layers: strong pronouns (their *pro*-DP) contain more structure, i.e. more functional layers, than pronominal clitics (which they term *pro*-ɸ). Extending the above, we can claim that strong pronouns are full DPs but without a descriptive contentful noun (e.g. like *table*), as they embed an empty noun instead, an $e_N$ (Cardinaletti and Starke 1999; Panagiotidis 2002). Strong pronouns also encode semantic gender. Similarly, clitic pronouns have a less articulated internal structure (Cardinaletti & Starke 1999; Déchaine & Wiltschko 2002 – among others). At the same time, clitics *only* encode grammatical gender.[7]

So, strong pronouns have semantic gender *and* more structure, whereas clitics bear grammatical gender and are made from fewer functional layers. Let's see how this correlation can make good on our promissory note for something 'enlightening' with respect to Gender features.

We can achieve this by synthesizing the above analyses. Omitting crucial but irrelevant details, and using the Déchaine & Wiltschko (2002) terminology for convenience and consistency, we have the following picture:

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[6] This difference could also possibly be correlated with why clitics move (in two steps, first as XPs and then as heads) and why weak pronouns move (in one step, as XPs), whereas strong pronouns may occupy standard argument positions. For discussion see Shlonsky (1997, 178–179), Laenzlinger & Shlonsky (1997, 160), Cardinaletti & Starke (1999, 196), Corver & Delfitto (1999, 805–808) Panagiotidis (2002, 65–69).

[7] Merchant (2014, 21–28) provides a detailed account on where and when the semantic gender projection can appear in the context of empty nouns by examining the behaviour of gender with ellipsis in Modern Greek. I am looking forward to future work combining his account with the present one.

(11)    Strong pronouns vs. clitics, *take one*.

```
         DP                              φP
        /  \                           /    \
       D    φP                        φ      eN
           /  \
          φ    eN

   strong pronouns                 pronominal clitics
```

So, let us take the next step and claim that the availability of semantic gender in strong pronouns is actually the result of the presence of *more* structure. Pronominal clitics being 'deficient' (Cardinaletti and Starke 1999) pronominal forms, they would amount to a structure with a minimum of functional entourage, perhaps made of a single functional layer, and the empty noun. The result of this stripping down game is the realization that the nominalizer *n* – the empty noun notated as $e_N$ in (11) above – does *not* encode semantic gender, only grammatical gender.

(12)    The nominalizer *n* encodes *grammatical* Gender features.

In other words, if (12) is on the right track, it actually turns out that *n* encodes grammatical, not semantic Gender features. This claim is interesting also because it runs counter to the analysis in Atkinson (2015), who upholds the generalization made in (4) – namely that semantic gender is higher than grammatical gender – but argues that semantic gender ([*i*Gen]) features are hosted on the nominalizer *n* and grammatical ones ([*u*Gen]) on the actual root that makes up the noun. Moreover, as a reviewer points out, in languages with a grammatical gender system, all nouns must bear *grammatical* gender: being a noun entails having grammatical Gender features, but not necessarily encoding semantic gender. So, it turns out that there are very good empirical reasons to argue for (12).

Returning to pronominals, if grammatical features were encoded on the root, we would expect root-less pronominal clitics not to encode grammatical gender – contrary to the state of affairs in (11). Indeed, clitic pronouns mark grammatical gender, [*u*Gen], *precisely* in the absence of any root. On top of this empirical observation, we would not expect gender to be marked on roots anyway, as roots are widely understood to be acategorial for a number of conceptual and empirical reasons (Arad 2005; Acquaviva 2009; Borer 2009; Acquaviva and Panagiotidis 2012; Harley 2014). Dwelling on just the straightforward reason why gender could not be encoded on roots, consider that they derive

both nouns and verbs; therefore roots possessing inherently nominal features, like Gender features, would be unexpected and problematic. Furthermore, Atkinson (2015) claiming that the said Gender features are uninterpretable is even more difficult to accommodate: we would not expect roots, the heart of lexicality, to host grammatical gender, i.e. *uninterpretable* Gender features [*u*Gen]. After all, since Chomsky (1995), uninterpretable features are generally understood to be borne by functional elements.

Summing up what empty nouns reveal about gender, let us review the claims that are compatible with the gender situation in pronominals, as described above:

(13) Grammatical Gender features are uninterpretable; semantic gender features are interpretable, as in Kramer (2009) and as anticipated in (6).

(14) Grammatical Gender features ([*u*Gen]) are hosted on the nominaliser, i.e. the *n* head.

(15) Semantic Gender ([*i*Gen]) features are hosted higher than *n*.

The obvious next question is

(16) Where are semantic Gender ([*i*Gen]) features hosted?

Semantic gender is tightly associated with animacy: only animate kinds can be associated with natural gender, female or male. As to *which* animate kinds may be associated with natural gender, sex in our case, this is a matter of conceptual biases and prototypicality, i.e. a conceptual rather than a grammar-internal issue. Moreover, animacy is grammaticalized in a number of languages, consider e.g. the *a* insertion in Spanish for animate accusative objects:

(17) a. He visto el coche.

Have seen the car

b. He visto a María / al profesor.
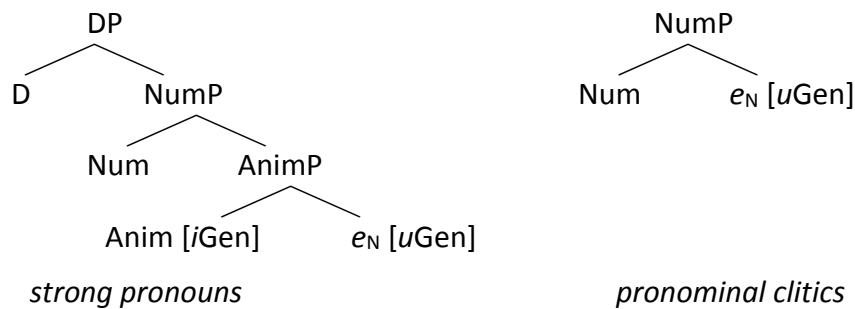
Have seen A Maria / A.the professor

Perhaps then we can hypothesize that semantic gender is encoded in the head of an animacy projection above *n*P, e.g. Picallo's (1991) GenP:[8]

(18) Anim [*i*Gen] > *n* [*u*Gen]

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[8] In this chapter semantic (interpretable) gender entails animacy, which is tacitly understood to be always semantic. This might work for most languages, however, in reality the plot is thicker. As a reviewer observes, languages like Ojibwe, which have animacy-based gender systems, make a distinction between *semantically animate* nouns and *grammatically animate* nouns. This is certainly something to consider in future discussions on the correlation between animacy and semantic gender.

As a result, we may now refine the tree structure in (11). We replace $\varphi$ with Num (Ritter 1995) and the resulting picture would be the one proposed in this chapter.

(19) Strong pronouns vs. clitics, take two.

```
            DP                                    NumP
           /  \                                   /   \
          D    NumP                             Num    eN [uGen]
               /   \
             Num    AnimP
                    /    \
              Anim [iGen]  eN [uGen]
        strong pronouns              pronominal clitics
```

Let us summarize the conclusions so far: grammatical and semantic gender act as restrictions on pronominal reference. This means that neither can be located on roots. Moreover, strong pronouns are typically interpreted as animate or human and, at the same time, have been argued in at least two different lines of research (Cardinaletti and Starke 1999; Déchaine and Wiltschko 2002) to contain more structure than pronominal clitics. At the same time, pronominal clitics seem to contain little more – if anything – than a Number head *Num* and a nominalizer *n*. This brings us to the conclusion that grammatical gender, an uninterpretable feature, must be hosted on *n* and semantic gender, an interpretable one, on a higher head, possibly an Animacy head.[9]

### 4. A case of grammatical transgendering

The situation summarized in (14) and (15) feels counterintuitive: we would expect semantic gender to be an inextricable part of the 'lexical entry' – as mentioned before: when we talk about mothers, we expect them to be female in a fundamental way, as part of the definition of the concept 'mother'. This is expected and correct; however, the tacit assumption that there exists a direct association between the concept of 'mother' and how it is represented grammatically, via a monadic element like a 'lexical noun', is a residue of lexicalism.

Recall at this point that in this analysis, and any analysis that takes Gender features seriously as syntactic and semantic – cf. the discussion of (8) – features, we endorse a

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[9] A reviewer points out that the proposed analysis is nicely supported by French nouns like *personne* 'person', *victime* 'victim', *sentinelle* 'guard' etc., which carry feminine grammatical gender but may refer to males; at the same time, a feminine pronoun is used (*elle* 'she') to refer back to them.

separationist grammatical model encompassing syntactic decomposition. Now, syntactic categorization analyses are customarily embedded within Distributed Morphology (Halle and Marantz 1993). However, I believe that any consistently realizational grammatical framework, where forms are inserted late, can be used equally well, as long as it incorporates

i.  a separationist distinction (and/or a dissociation) between syntactic feature structures and their morphological exponence, cf. also Beard (1995) and

ii.  Syntax-all-the-way-down (Marantz 1997; Harley and Noyer 1999), i.e. the same combinatorial mechanism behind word building and sentence building.

In other words, concepts are associated directly with syntactic feature structures, *not with the forms* these are associated with, e.g. not with *mother*, *mère* or *madre*. Keeping these points in mind, the relative order between semantic gender (say on *Animacy* heads) and grammatical gender (on the nominalizer *n*) is of no importance with respect to the form of the noun if these projections are all first phase-internal. In any case, the proposed general structure is the following:

(20)  Gender hierarchy

```
              AnimP
            /      \
    Anim [iGen]     nP
                  /     \
            n [uGen]    ROOT
```
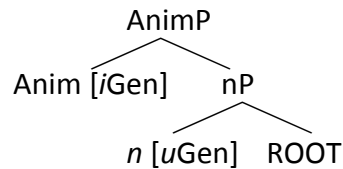
However, one need not be satisfied with conceptual arguments that the above state of affairs must hold. Moreover, it is indeed possible not to rely solely on the evidence from the gender of empty nouns in pronominals, as described in the previous section.

More empirical support for the structure in (20) comes from the fact that even in synthetic languages gender inflection can be morphemically distinct to the nominal stem. Modern Greek is a case in point, as nominal endings may mark gender unambiguously.

(21)         Morphemic distinctness of gender

a. *grammatical gender distinguishes between lexical entries*

zaxar-i       zaxar-o

sugar-FEM     sugar-NEUT

'sugar'       'blood glucose'

b. *semantic gender makes sex distinctions*

*papi-os*　　　*papi-a*

duck-MASC　　duck-FEM

'drake'　　　'duck'

c. *grammatical gender does nothing at all*
　　*solin-as*　　　　　*solin-a*

tube-MASC　　tube-FEM

'tube'


*yaurt-i*　　　*yaurt-i*

yoghurt-FEM　　yoghurt-NEUT

'yoghurt'


In the a. example above, grammatical gender may distinguish between different 'lexical entries', a situation familiar from Spanish *libr-o* ('book') vs. *libr-a* ('pound'). This is to be expected if grammatical Gender features are encoded on the noun-making head, i.e. on the nominalizer *n*. In the b. example, semantic gender distinguishes the natural gender of an animate referent like 'duck'. In the c. example, grammatical gender makes no difference at all, as particular nouns (actually very few) may take one gender or another.

Furthermore, and as is the case with other languages, semantic gender marking may or may not be borne by the "lexical entry" but it must be agreed with. See Ihsane and Sleeman (2016) for extensive discussion and important insights; what follows is an outline of the situation in Greek (see also Merchant 2014, 11–18):

(22)　　　A female doctor:

a.　*i*　　　　*yatr-os*

the. FEM　　doctor.MASC

b.　*i*　　　　*yatr-in-a*

the. FEM　　doctor-FEM-FEM

c.　*i*　　　　*yatr-es-a*

the. FEM　　doctor-FEM-FEM

d.　*o*　　　*yatr-os*

the. MASC　doctor-MASC

As indicated by concord, natural gender may only be indicated through concord, as in the a. example, or through concord *and* a dedicated feminine gender affix –*in*– or –*es*– suffixed to the nominal stem *yatr*–. Interestingly, what is impossible is leaving natural gender unexpressed with a noun like 'doctor', as happens in the d. example.[10] So, there is some empirical support that semantic gender is separate from the concept it is associated with, even if the evidence comes from simple inspection of superficial morphological patterns.

Fortunately, there exists more concrete evidence beyond just concord and affixation patterns for an independent head where semantic Gender features are situated, i.e. for an *Anim* head as in (20). Marked structures in Greek and Brazilian Portuguese slang usage (Lazzarini Cyrino, Gabbai Armelin, and Minussi 2013) suggest that semantic gender features are indeed completely divorced from the actual lexical noun, and they are most likely hosted in a head of their own. Remember of course that by 'lexical noun' we would mean the projection headed by *n*, the nominalizer. To circumvent such fallacious, or at least vacuous, statements in a representational / separational grammatical model, let us rephrase the claim: semantic gender features are introduced in a head higher than *n*, as in (20). Moreover, let us examine the evidence from Brazilian Portuguese, as presented and discussed in Lazzarini Cyrino, Gabbai Armelin, and Minussi (2013: 78):

(23)

    a.    ***A garrafa*** está na minha casa.

            the.F bottle(F) is in my house.

            The bottle is in my house.' or 'A girl whose nickname is 'bottle' is in my house.'

    b.    ***O garrafa* está na minha casa*.

            the.M bottle(F) is in my house.

            '*The bottle is in my house.'  'A guy whose nickname is 'bottle' is in my house.'

(24)

    a.    *A **bola** está na minha casa*.

            the.F ball(F) is in my house.

            'The ball is in my house.' or 'A girl whose nickname is 'ball' is in my house.'

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[10] A reviewer wonders what we are to make of nouns like *korits-i* ('girl-NEUT') or *mother*. In nouns like that the *n*P unambiguously implies natural gender – pending the technical implementation of exactly how this is executed.

b. ***O bola** está na minha casa.*

the.<small>M</small> ball<small>(F)</small> is in my house.

'*The ball is in my house.'   'A guy whose nickname is 'ball' is in my house.'

As noted ibid., the b. examples "are perfectly interpretable in a context in which 'bottle' and 'ball' are related to animate entities in the world". Once more, semantic gender is directly related with animacy.[11] Additionally, in (23) and (24) semantic gender is *added* on an inanimate noun in the b. examples and it is made manifest via concord, exactly like in Greek as illustrated in the a. example of (22). In the Brazilian Portuguese examples, addition of semantic gender coerces both an animate and a male (or female, albeit invisible, in the a. examples) interpretation for grammatically feminine and inanimate nouns like 'bottle' and 'ball'. Put in terms of (20), addition of *Anim* coerces an animate and male (or female) interpretation – although the *n*P on its own would be interpreted as inanimate. Finally, again in support of (20), it is also worth noting that the article in the b. examples above agrees not with the grammatical feminine gender of the noun (on *n*, by hypothesis), but with the semantic gender on the higher animacy projection. So, (5) is revisited and refined as follows:

(25)     Concord patterns with gender

    a.   D[*u*Gen]<small>PROBE</small> … Anim[*i*Gen] <small>GOAL</small> … *n*[*u*Gen]   Agree with semantic gender

    b.   D[*u*Gen]<small>PROBE</small> … *n*[*u*Gen]<small>GOAL</small>                    Agree with grammatical gender

In the Brazilian Portuguese b. examples, the preference of agreement for the higher situated semantic Gender feature leads to a superficial concord mismatch.

A superficial concord mismatch is also possible in Greek. In slang usage, typically found within a particular subculture of the Greek gay / queer community, a similar phenomenon exists; I will informally call "linguistic transgendering". This is unlike cases such as *le / la poète* because this particular version of playing with semantic gender is about spontaneous, one-off, creative coinages and because they involve something like coercion, similar to what goes on in the Brazilian Portuguese cases.  Pragmatically it resembles all

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[11] An anonymous reviewer points out examples like *a Júpiter* (the.<small>FEM</small> Jupiter.<small>MASC</small>) in Portuguese, which refers to Mozart's 41<small>st</small> (KV 551), not an animate entity. Evidently, this is a case of ellipsis, in lieu of *a Sinfonia Júpiter* – akin to 'Beethoven's Seventh' (i.e. Symphony) and the like.

those "ladies!" or "girls!" of military slang, without however necessarily being overtly and crudely offensive.

(26)

    a.    ***O Antonis*** *irthe*.

        the.M AntonisM came.

        'Antonis has arrived.'

    b.    ***I Antonis*** *irthe*.
        the.F AntonisM came.

        [May be used as a term of endearment, pejoratively...]

(27)

    a.    ***O vasilias*** *irthe*.

        the.M kingM arrived.

        'The king arrived.'

    b.    ***I vasilias*** *irthe*.

        the.F kingM arrived.

        [May be used as a term of endearment, pejoratively...]

    c.    ***I vasilisa*** *irthe*.

        the.F queenF arrived.

        'The queen arrived.'

The above examples are interesting because, unlike the situation in (23) and (24), grammatical gender is unambiguously marked *–is* in (26) and *–as* in (27). However, in the b. examples of (26) and (27) above there is concord with an invisible feminine feature, one that encodes both animacy *and* femininity – with a host of interesting and highly marked pragmatic effects.

### 5. Conclusion

In this paper we looked at evidence that semantic gender is encoded higher than grammatical gender. This evidence came from the gender specification of 'empty nouns' in strong pronouns and pronominal clitics, as well as from linguistic transgendering in Brazilian

Portuguese and Greek. Moreover, we used evidence from empty nouns in pronominals to show that Gender features are never encoded on roots and that grammatical gender is encoded on the nominalizer *n*. We therefore examined evidence that grammatical gender, wherever available, is tightly related with the process of syntactic categorization of roots, ultimately strengthening Kramer's (2009) account that it is located the *n* head, the nominalizer, itself. Finally, linguistic transgendering effects in Brazilian Portuguese and Greek, reminiscent of coercion exercised on behalf of Number on mass nouns (e.g. *three coffees*), may enable us to better understand the role of semantic gender as, possibly, *something* like Number, as opposed to being an intrinsic feature of the 'lexical entry' for nouns.

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