The Development of Mass / Count Distinctions in Indo-European Varieties

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Abstract
Some Western Indo-European (IE) languages, namely English, Ibero-Romance, Scandinavian and South-Central Italian varieties, have developed new gender distinctions based on the count/mass interpretation of nouns. The aim of this paper is to determine to what extent these varieties confirm the account of the development of gender suggested by Greenberg (1978) and Corbett (1991, 2006). The data from these IE varieties support the central role played by demonstrative and personal pronouns in the process of the rise and the renewal of gender. Once the new gender distinction is well established in the pronominal system, it can spread to other word classes and syntactic positions following two different paths until it reaches the noun. One follows the agreement hierarchy (Corbett 1991, 2006), the other disregards it and coincides with the path suggested by Greenberg (1978).

1. Introduction
Some Western Indo-European (IE) languages, namely English, Ibero-Romance, Scandinavian and South-Central Italian varieties, have developed new gender distinctions based on the count/mass interpretation of nouns.¹ The development of such systems is cross-linguistically rare, but nevertheless documented. My data deal both with gender systems in pronouns and nouns, and as will be seen, with the way in which pronominal systems can become noun systems. Two hypotheses have been suggested in the literature regarding this topic. Both agree to consider pronouns the original locus of any gender development, but they disagree about the way in which this new pronoun gender distinction spreads morphosyntactically to the nouns. According to Greenberg (1978), who studied the Bantu languages, demonstrative (or personal) pronouns are the origin of gender distinctions, and they represent the first stage of gender development. In a second stage, the new gender distinction, which originated in the demonstrative pronouns, then spreads to the noun phrase when these are used as articles with the noun (firstly as definite articles, and secondly as non-definite articles but with a specific

¹ Although mass/count distinctions are obviously related with number, all IE varieties analysed here use gender markers to realise them. For that reason, I will treat them as distinctions of gender, in the same way that other scholars have done regarding English, Scandinavian, Ibero-Romance and Central-South Italian varieties, and I will not discuss here whether these distinctions should be better classified as number or even as a different grammatical category. It is useful, however, to bear in mind that the category of gender typologically implies the category of number. Greenberg’s Universal 36 says: “If a language has the category of gender, it always has the category of number”.

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reading). In this phase the subject exhibits gender markers and the predicate can lack them. Finally, in a third stage, the article is incorporated into the noun as a gender affix. Then the affix becomes a sign of nominality regardless of the definite or non-definite specific use of the noun. Corbett’s account (1991:310-2, 248-59, 2006:264-71) is slightly different in some aspects, especially regarding the route which the process of extension takes. Firstly, he locates the origin of new gender distinctions as being in the personal pronouns although he admits that they are usually derived from demonstrative pronouns. Secondly, the extension of the new gender distinction follows the path of the agreement hierarchy, i.e., it gradually spreads backwards from the personal pronouns to the predicate and thereafter to attributive modifiers. When all the possible agreement targets reflect the new gender distinction, the noun changes its gender, and it can then adjust its morphology. Although Corbett (1991:256-7, 2006:271) also mentions the possibility of an extension which proceeds forwards from the noun to the predicate, he considers the agreement hierarchy the typical path of extension.

The comparison of four different IE varieties which present mass/count gender distinctions offers an interesting platform to test these hypotheses on the rise and renewal of gender for several reasons. Firstly, these mass/count distinctions seem to be new and independent developments of older IE gender systems that are usually well known. Secondly, they show different grades of gender development measured in terms of the word classes and syntactic positions which have the new gender distinction. Thus, these varieties can be considered as testimonies of subsequent stages of gender development, apart from the gender peculiarities distinguished in each variety and the gender systems they come from.

2. First stage or incipient stage of gender development

The first stage of gender development can be seen in the English Dialects of the Southwest of England, Newfoundland in Canada or Tasmania in Australia (Wagner 2003, 2004, Siemund 2002, 2005, 2007). In these dialects the pronouns he / she can extend its standard use referring to the sex of human (or some animate) entities and refer to inanimate, countable and concrete entities. Meanwhile, it remains stable referring to mass and abstract entities. For instance,

(1) a. Pass the loaf. He’s over there. (SWEnglish)
b. I like this bread. It’s very tasty.

Apparently there was a similar distinction in the paradigm of demonstratives, at least this was the case in the 19th century English of West Somerset: theäse / thik (count) vs. this / that
The examples given illustrate the use of demonstratives as determiners according to the count/mass interpretation of nouns:

(2) a. Come under theāse tree under this water. (SWEnglish)
    b. Goo under thik tree, an’ zit on that grass.

Whereas personal pronouns and demonstratives express mass/count distinctions, articles always remain invariable. In the 20th century the distinction has been nearly lost in demonstratives and it is only preserved in the personal pronouns. Since *it* refers to inanimates in Standard English, *he* and *she* are usually considered to be the extending forms.\(^2\) This new use of old pronouns in terms of the semantic interpretation of nouns as mass/abstract vs count/concrete entities seems to witness the starting point of a renewal of gender.

3. Second stage of gender development: extension of the new distinction

Once the new distinction has been established in the pronouns, it can spread in two different ways to other word classes and syntactic positions: one according to the agreement hierarchy and another which ignores it. I will consider this extension as the second stage of gender development.

3.1 Extension according to the agreement hierarchy

The first possibility of extension is illustrated by the Ibero-Romance dialects of some Spanish regions, Asturias, Cantabria and Western Castile, and by the Scandinavian languages: Swedish, Danish, Norwegian. Both these linguistic families present the same pattern of spreading governed by the semantic agreement hierarchy suggested by Corbett (1991, 2006).

(3) Agreement Hierarchy:
    attributive > predicate > relative pronoun > personal pronoun

“For any controller that permits alternative agreements, as we move rightwards along the Agreement Hierarchy, the likelihood of agreement with greater semantic

\(^2\) Although the stage represented by Southwest English is apparently a new development, it has also been suggested that it could be a partial preservation of the Old English gender system (Rice & Steinmetz 2006). Certainly Lass (1992:115) considers that the SW accusative pronoun /ən/ is a relic of the old masculine accusative *hine*. Old English had a three way gender system, masculine, feminine and neuter, with agreements exhibited inside and outside the NP. However, personal pronouns could override this rule and be used according to semantic criteria. These semantic criteria finally lead to reassign inanimate masculine and feminine nouns to neuter gender, before nominal gender was completely lost and reduced to pronominal gender. In the light of Southwest dialects, Siemund suggests (2007:12, 255) that abstract masculine and feminine nouns might have become part of the neuter gender a long time before the inanimate count nouns. But it is more difficult to assume this analysis for other varieties, such as Tasmanian English, where *he* and *she* have certainly been extended at the expense of *it* to refer to count (in)animate entities (cf. Siemund 2007:79-103).
justification will increase monotonically (that is, with no intervening decrease)” (2006:207).

3.1.1 Ibero-Romance dialects

Since Latin neuter gender was lost as a nominal category, there are just two lexical genders in Western Ibero-Romance, masculine and feminine. Nevertheless, these varieties still have masculine, feminine and neuter pronouns, both personal and demonstrative ones. Some dialects offer an interesting gender agreement traditionally known as mass neuter agreement (Fernández-Ordóñez 2006-07). In these dialects neuter pronoun agreement is to be seen not only with non-lexical referents (which is the norm in Spanish), but with lexical antecedents when the masculine or feminine noun (singular or plural) has a mass interpretation. This agreement is not limited to pronouns but it extends to adjectives: post-nominal attributive adjectives, predicative adjectives and depictive adjectives. Nevertheless, the mass neuter agreement is never exhibited by pre-nominal elements, such as articles or adjectives, or rarely by the noun itself, as Table I illustrates.

Table I: Gender distinction according to the word class

<table>
<thead>
<tr>
<th>Determiners (Article and Demonstrative)</th>
<th>Noun</th>
<th>Adjectives</th>
<th>Personal and Demonstrative Pronouns</th>
</tr>
</thead>
<tbody>
<tr>
<td>MASC/FEM</td>
<td>MASC/FEM</td>
<td>MASC/FEM/NEUT</td>
<td>MASC/FEM/NEUT</td>
</tr>
</tbody>
</table>

(4) a. El buen vinu blanc-o se toma fri-o. Pruéba-lo
the.M good.M wine.M white-N is drunk cold-N taste-it.N
“Good white wine is drunk cold. Taste it”

b. La buen-a leche fresc-o se toma templad-o. Pruéba-lo
the.F good-F milk.F fresh-N is drunk warmed-N taste-it.N
“Good fresh milk is drunk warmed. Taste it”

c. La-s medicina-s es car-o. Lo compramos en la farmacia
the.F-Pl medicine.F-PL is expensive-N it.N we buy in the pharmacy
“Medicines are expensive. We buy them in the pharmacy”

Here we see how mass neuter agreement occurs with nouns that receive a mass interpretation, both masculine and feminine and singular and plural. We also see how adjectives can exhibit neuter agreement both in predicative and attributive positions. The statistical and geographic distribution of this agreement proves that it arose in the pronouns and that it gradually extended by steps: firstly to depictive adjectives (secondary predicates), secondly to predicative adjectives, and finally to attributive adjectives, as table II illustrates. In the table the + sign refers to 30% or more of mass neuter agreement and the – sign to less than 30%:
Table II: Gender distinction according to the syntactic position

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Asturias</td>
<td>–</td>
<td>–</td>
<td>+ 29%</td>
<td>+ 40,5%</td>
<td>+ 58,7%</td>
<td>+ 65%</td>
<td>+ 86,4%</td>
</tr>
<tr>
<td>Cantabria</td>
<td>–</td>
<td>–</td>
<td>– 10%</td>
<td>+ 35%</td>
<td>+ 55%</td>
<td>+ 59,3%</td>
<td>+ 81,5%</td>
</tr>
<tr>
<td>Castile</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>– 18,5%</td>
<td>+ 51,2%</td>
<td>+ 53,3%</td>
<td>+ 76,5%</td>
</tr>
</tbody>
</table>

So the mass neuter agreement begins with the pronouns, usually placed in the sentences following the one which contains the antecedent. Thereafter the mass neuter agreement progresses backwards reaching the previous sentence which contains the nominal antecedent. Once in this sentence, the extension continues from the predicate (secondary or primary) to the subject. Inside the nominal phrase, the mass neuter agreement cannot reach across to all its components: just those located after the noun, the post-nominal attributive adjectives. The determiners and pre-nominal attributive adjectives remain masculine or feminine, just as the nouns. There is also an interesting difference between the percentage of tokens of predicative adjectives with the copula *ser* (individual level predicates) and those with the copula *estar* (stage level predicates). Mass neuter agreements are clearly more frequent when the adjective denotes a stage level predicate (as a predicative adjective or a secondary predicate).

This pattern of diffusion coincides with the semantic agreement hierarchy stated by Corbett and it bears a remarkable similarity to the behaviour of other IE languages or dialects: namely the Scandinavian ones (see Ringaard 1973, Braunmüller 2000, Andersson 2000, Josefsson 2006, Enger 2004).

3.1.2 Scandinavian languages

Danish, Swedish and Old Norwegian have reduced the old gender system of IE to two genders: common gender and neuter gender. Common gender comes from the combination of masculine and feminine. Although there are just two lexical genders, there are still distinct masculine and feminine personal pronouns to refer to human antecedents regardless of the lexical gender (common or neuter). This is usually described as semantic agreement.

Table III: Gender distinction according to the word class:

<table>
<thead>
<tr>
<th>Determiners (Article and Demonstrative)</th>
<th>Noun</th>
<th>Adjectives</th>
<th>Personal Pronouns</th>
</tr>
</thead>
<tbody>
<tr>
<td>COM / NEUT</td>
<td>COM / NEUT</td>
<td>COM / NEUT</td>
<td>MASC / FEM / COM / NEUT</td>
</tr>
</tbody>
</table>
But there is also another type of semantic agreement operating in the Scandinavian languages: when a common noun receives a mass interpretation, this noun will exhibit neuter agreement in personal pronouns and in predicative adjectives. For instance,

(5) a. Olie er god-t / ?god.C Det (*den) er god-t. (Danish)
    oil.C is good-N / ?good.C it.N (*it.C) is good-N
    “Oil is good. It is good”

    b. Ærter er god-t / god-a Det (*de) er god-t
    peas.C-Pl are good-N / ?good-Pl It.N (*they.Pl) is good-N
    “Peas are good. It is good”

(6) a. Senap är gul-t / ?gul (Swedish)
    mustard.C is yellow-N / ?yellow.C
    “Mustard is yellow”

    b. Ärter är got-t / ?god-a
    peas.C-Pl are good-N / ?good-Pl
    “Peas are good”

As with the Ibero-Romance data, the neuter agreement occurs both with singular and plural antecedents as long as they have a mass interpretation. And once again like in the Ibero-Romance data, attributive adjectives, which can only be placed before the noun, never exhibit neuter agreement, as these sentences illustrate for Norwegian:³

(7) a. Mor lager god-e (*god-t) pannekaker (Norwegian)
    mother makes good-Pl (*good-N) pancakes-Pl
    “Mother makes good pancakes”

    b. God (*god-t) vodka er sun-t
    good.M (*good-N) vodka.M is healthy-N
    “Good vodka is healthy”

As with in the Ibero-Romance cases, the Scandinavian data can be accounted for by the agreement hierarchy, as Enger (2004) has suggested. But in this case the extension of the neuter agreement has not advanced as far as it has in Ibero-Romance, since apparently it has not reached the noun phrase. This can be illustrated if we compare the respective patterns of spreading with Corbett’s semantic agreement hierarchy:

³ Modern Norwegian has restored masculine and feminine nominal gender (see Braunmüller 2000), after their merger in common gender in Danish, Swedish and Old Norwegian. Nevertheless, neuter mass agreement do follow the same pattern even though they have masculine or feminine referents instead of common gender referents (Enger 2004).
(8) Mass agreement patterns in Ibero-Romance and Scandinavian varieties
Scandinavian languages:
predicative adjective > personal and demonstrative pronoun

Ibero-Romance varieties:
attributive > predicative > secondary predicate > personal and demonstrative pronoun

Corbett’s Agreement Hierarchy:
attributive > predicate > relative pronoun > personal pronoun

3.1.3 Towards the rise of new lexical genders

This path of diffusion (from the predicate to the NP, usually a subject) does not necessarily lead to the rise of new lexical genders. Just two varieties, one in central Asturias and another in Jutland, seem to have developed a new nominal gender distinction.

In Quirós (central Asturias) we find an emerging lexical gender by extending the neuter demonstrative as a determiner with masculine nouns that receive a mass interpretation (Viejo 2001). It has to be borne in mind that the neuter demonstratives _esto, eso, aquello_ are impossible as determiners in all Ibero-Romance varieties:

(9) a. Est-o queis-o / Es-o pan / Aquell-o vin-o (Quirós Asturian)
    this-N cheese-N that-N bread that-N wine-N

b. Est-e queis-u / Es-e pan / Aquel vin-u
    this-M cheese-M that-M bread that-M wine-M

“This piece of cheese” “That loaf” “That kind of wine”

As can be seen, some masculine nouns can then adjust their morphology according to the demonstrative pattern with –o as the neuter morpheme.

In the Scandinavian languages, there is also some evidence for a similar process. In Danish, a certain number of nouns can change their gender according to their interpretation as mass or count entities. For instance,

(10) a. øll-et > øll-en (Danish)
    beer-the.N beer-the.C
    “The beer” “The (bottle of) beer”

b. tyll-et > denne tyl
    tulle-the.N This.C tulle.
    “The tule fabric” “This (type of) of tule fabric”

c. med det te > med den te
    with this-N tea with this-C tea
    “With this (quantity of) tea” “With this (kind of) tea”
It can be considered in these cases that what originally was semantic agreement becomes lexical agreement, since it is expressed by the determiners, the definite article and the demonstratives, regardless of whether they are placed before or after the noun.

In Jutland, this possibility has developed further and there is a tendency to reallocate all common nouns that have a mass interpretation with neuter gender (such as *mælk* “milk”, *ost* “cheese”, *rug* “rye” o *suppe* “soup”) (Braunmüller 2000:46). This reassignment of nouns according their semantic interpretation attests to the renewal of nominal gender. Although these dialects still have common and neuter genders, the criteria to assign nouns to them have essentially changed and the source of renewal seems to have been semantic agreement. In the dialect of West Jutland this tendency has certainly produced a new gender distinction based on the mass/count interpretation of nouns. In West Jutish common and neuter gender are no longer expressed by articles or adjectives, as in English, but the existence of the new gender distinction can still be seen, based on the interpretation of nouns as mass or count entities, in the personal pronouns and in the demonstratives which are both used as pronouns and as determiners. These minimal pairs (11a-b, 12a-b) illustrate the contrast (Ringgaard 1973:30-1):

(11) a. Æ egetræ i wor haw den er stor
    “The oak tree in our garden this.C is big”
    
    b. Egetræ det er bedst til mobler
    “Oak wood this.N is good for furniture”

(12) a. *Den* fisk a fanget i søndags
    “That.C fish I caught on Sunday”
    
    b. A fik al *det* fisk a ku spis
    “They gave me all that.N fish I could eat”.

As can be seen in both Scandinavian and Romance, it is the demonstrative used as a determiner which is the element that conveys the new gender distinction to the noun phrase. In Quirós is not possible *lo pan*, with a neuter article, but it is possible *esto pan*, with a neuter demonstrative. In West Jutish articles no longer exhibit gender distinctions: *ae* “the” is used indistinctly for nouns that belong to both genders, common and neuter, in Danish. But the use of the demonstrative as a determiner and as a pronoun shows the existence of a nominal gender distinction. Demonstratives (but not yet articles) are the only markers of gender in Bwamu, a Bantu language studied by Greenberg (1978:62) and presented as the first step of gender development.
3.2 Extension not following the agreement hierarchy: South-Central Italian dialects

The spread of the new pronoun distinction to other word classes and syntactic positions can also occur in a way which is not in accordance with the agreement hierarchy. As we have seen, the semantic agreement path can create new lexical gender distinctions. However, it seems that this is a long process which requires the expression of the new gender distinction in a large number of targets before it reaches the noun. Apparently, there is a shorter path which can lead to the straightforward emergence of new nominal gender distinctions. South-Central Italian dialects provide us with an example of this route, which is the one which Greenberg (1978) focuses his attention on.

In South-Central Italian dialects we find mass neuter agreement on masculine nouns with a mass interpretation (Vignuzzi 1988, 1997, Lorenzetti 1995, Maiden 1997, Haase 2000, Lüdtke 1965, 2001). The mass neuter agreement is regularly expressed by determiners such as definite articles and demonstratives, and by personal and demonstrative pronouns, but rarely by nouns and attributive adjectives and even less so by the predicate. This distribution, however, is not random, since according to Lorenzetti (1995:156-161), the mass neuter agreement is governed by an implicative pattern: all South-Central Italian varieties have distinct forms of articles, demonstratives and personal pronouns which distinguish mass and count interpretations of masculine nouns (13a-b), but just a few varieties, for instance those of Norcia and Rocca di Papa, have extended this distinction to the nouns (14a-b). Finally, even fewer varieties, like the ones spoken in Servigliano and Genzano (15a-b), have spread it to nouns and attributive adjectives. The following step, not reported by Lorenzetti, is registered by Lüdtke (2001:188-9) in the Ripantransone region. There the distinction extends to the predicate, both to predicative adjectives and to the verb itself (16a-b, c-d):

(13) All South-Central Italian varieties
   a. L-o pane / Quest-o pane l-o vedi?
      the-N bread / this-N bread do you see it-N?

   b. L-u cane / Quist-u cane l-u vedi?
      the-M dog / th this-M dog do you see it-M?

(14) Rocca di Papa
   a. 1 2jj-u nwov-u

Lüdtke (2001:186) suggests another implicative pattern based on the word classes involved: verb > noun > adjective > pronoun. He gives adjectives a higher place in the hierarchy because he claims that the first type of noun phrase to exhibit neuter agreement was that formed by an article + adjective: ILLUD BONUM > l-o bon-o, the-N good-N “The good thing (anything good)”. 
As we can see, in South-Central Italian dialects the new gender distinctions, which certainly emerged from Latin demonstrative pronouns, jump directly to the determiner position and thereafter spread to nouns, attributive adjectives, and finally to the predicate. The direction of this spreading goes from the NP, usually the subject, to the predicate, and in this way its directionality is the opposite of that of the semantic agreement hierarchy.

(18) Agreement pattern in Central-South Italian dialects
predicate < attributive < noun < article and demonstrative determiner / personal and demonstrative pronoun

Apart from the different syntactic way in which the distinction extends, there are several reasons to believe that here we are not dealing with semantic agreement, except, perhaps, in the incipient stage represented by the pronouns. It is remarkable that in these Italian varieties neuter agreement never occurs with feminine or plural referents when they have a mass interpretation, unlike in Ibero-Romance and Scandinavian cases. This fact supports the idea that the preservation of neuter demonstrative pronouns and their later use as determiners -
restricted to Latin masculine or neuter nouns that receive a mass interpretation- has directly lead to the rise of a new lexical gender distinction within the NP. This distinction was only spread to all its components in a second phase, and to the predicate in the final stage. This is precisely the reconstruction suggested by Greenberg (1978) for Bantu languages, in which demonstratives, which later develop into articles, seem to have played the most relevant role in triggering the rise of nominal gender.

4. Conclusions

It appears that the starting point for the emergence of a new gender distinction is a new use of personal or demonstrative pronouns, according to renewed semantic criteria (this stage is illustrated by English dialects, but it can be detected in all the varieties analysed). The second stage is the syntactic extension of the new distinction to the noun. The extension can proceed along two possible paths. It can progress against the stream of the usual word order and go backwards through the predicate and attributive adjectives, until it finally reaches the noun and its determiners (this state of affairs is illustrated by the Ibero-Romance dialects and the Scandinavian languages). This route does not, however, seem to be the most efficient and quickest way to establish what we can consider a new lexical gender, since only a few dialects have succeeded in doing this despite the expression of the new distinction in a number of targets and in a great deal of varieties. The quickest way to achieve a new lexical gender distinction turns out to be the one where the personal or demonstrative pronoun is simultaneously used as a determiner with the noun. Once the determiner has changed the noun’s gender, the new agreement will gradually spread forward along the stream of the sequence to attributive adjectives and the predicate (this possibility is illustrated by South-Central Italian dialects). Whichever path is chosen, in these IE varieties a new nominal gender will arise once the pronoun is finally used as a determiner with the noun.

Greenberg (1978:78-80) pointed out that demonstratives could come from nouns used as classifiers. He also suggested that prepositions or postpositions (usually derived from locational nouns), or nouns meaning “small” or “big”, could be reinterpreted as class markers, hence, as gender markers. These possibilities do not differ from those suggested by present scholars of Bantu languages. According to Claudi (1997), gender marking on nouns might have arisen from nouns whose original function was to render an abstract idea into a more

5 It should be add that pronoun gender distinctions are usually the last to be lost in a process of gender decline: cf. our note 2 and Tables I and III, Greenberg’s 43rd Universal (“If a language has gender categories in the noun, it has gender categories in the pronoun”), and Priestly’s remark on IE gender demise according the following order: noun > adjective > pronoun (1983:339-341).
‘concrete’ entity, i.e., to signal referentiality. This could have been done by taking one of three routes, namely the ‘demonstrative channel’, the ‘derivational channel’, and the ‘numeral classifier channel’. It is obvious that the IE languages here analysed seem to prefer the first channel.

References:


