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A TYPOLOGY OF WEST IBERIAN GRAMMATICAL GENDER[1]

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ABSTRACT. Based on previous work that examines noun form and gender in Spanish and Asturian, this paper extends a DM account of grammatical gender and noun derivation to Portuguese and Galician. The aim is to shed light on how we might question the relation between noun form and gender in general. Secondary to this goal is to bring more awareness to linguistic phenomena to West Iberian languages, many of which are minoritized. This framework is further motivated by Kramer's (2015) analysis of the morphosyntax of gender. She analyzes multiple languages within this framework, giving rise to more possibilities to adopt a more typological perspective. This paper's claim is that West Iberian nouns can be organized into three form classes marked mainly by *-e/-Ø*, *-a*, *-o/-u*, depending on the language. Both feminine and masculine nouns are organized across these three classes and can end in any of these word markers. Issues arise when there are apparent mismatches between form and gender (cf. *mano*$_{F}$ *'hand'* or *mapa*$_{M}$ *'map'* in Spanish), and these cases are also explainable through the rule-based insertion of word markers onto theme nodes, either in the context of roots or the gender feature found on *n*. This paper shows that through DM we can further link West Iberian languages under one theory by grammatical gender and noun form. While the present study is merely a starting point, future work must be done to account for microvariation in these languages and incorporate languages from other regions of West Iberia.

Keywords: nominal gender; grammatical gender; Distributed Morphology; West Iberian; gender typology

RESUMEN. Este artículo se basa en investigaciones previas sobre el género y la forma del sustantivo en el español y el asturiano. Estos análisis se extienden al género gramatical y la derivación nominal del portugués europeo y del gallego a través del DM. Mientras se pretende arrojar luz en la relación entre la morfología nominal y el género en general, también se enfoca en representar las lenguas del iberorromance occidental. Este marco teórico se motiva por el análisis de Kramer (2015) sobre la morfosintaxis del género, el cual considera cuestiones similares en varias lenguas. Así, se ha abierto un camino para considerar lo mismo desde una perspectiva tipológica dentro del Ibérico Occidental. Lo que aporta este artículo es que hay tres clases temáticas para los sustantivos del iberorromance occidental, las susodichas marcadas por *-e/-Ø*, *-a*, *-o/-u*, dependiendo de la lengua. Tanto los sustantivos femeninos como los masculinos terminan en cualquier marcador y son de las tres clases. La aparente incompatibilidad entre forma nominal y género (cf. *mano*$_{F}$ *'hand'* o *mapa*$_{M}$ *'map'* en español), se puede explicar por la inserción fonológica de los marcadores y por reglas contextuales. Por último, este artículo demuestra que, a través del DM y bajo una misma teoría, las lenguas iberorromances occidentales tienen más en común

[1] Abbreviations in this article include AT athematic; AUG augmentative CT count; DIM diminutive; DM Distributed Morphology; EP European Portuguese; F/FEM feminine; M/MASC masculine; THV theme vowel.

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considerando las características compartidas del género gramatical y cómo se ve el sustantivo. Sin embargo, hay más camino que forjar para explicar la microvariación y las lengas distintas que se encuentran en la región occidental de la Península Ibérica.

Palabras clave: género nominal; género gramatical; Morfología Distribuida; Iberorromance Occidental; tipología de género

1. Introduction

To date, there is still much more work to be done on noun form and grammatical gender in West Iberian languages. It is not always clear how we might account for the relationship, or lack thereof, between the grammatical gender of a noun and the noun's form. In the vein of this topic, in particular, there is a research gap that merits exploration for the following reasons. Namely, existing research does not typically extend to all West Iberian languages, especially minoritized ones, and second, there is no consensus in the field regarding the theoretical framework in which we should couch our analyses. Regarding the issue of competing theories, previous work does touch on some very important aspects of noun form and grammatical gender in Romance. For Spanish, Bermúdez-Otero (2013) treats noun formation as stem-driven in that roots are stored with their word markers[2] in the lexicon. Harris (1991, 1992), however, takes a root-driven view and word markers are instead added through inflectional derivation. Other approaches rely on morphosyntactic operations to derive nouns through a DM lens in Spanish (Kramer 2015) and Asturian (Burner 2023). Fábregas (2024) considers the issue through Nanosyntax as a competing theory to generally characterize the syntax of Spanish nominal gender through a combination of different Class Phrases. This prior research is all viable to work towards a more complete theoretical answer for noun form and grammatical gender in Romance languages in general, but much more lay ahead to fully account for these characteristics from a typological perspective. However, we can make the following typological generalizations about West Iberian grammatical gender from the previously mentioned work:

1. Nouns can be organized into form classes labeled by word markers.
2. The word marker inventory typically consists of the vowels *-e*, *-a*, *-o*, and *-u*.
3. Masculine and feminine nouns occur across form classes and therefore, word markers are not necessarily an indication of the noun's gender.

The above generalizations are captured in example form in (1), where nouns of both masculine and feminine gender can clearly be grouped by their word marker inventory, whether *-e*, *-a*, *-o*, or *-e*, *-a*, *-u*.[3] Another word marker in theoretical literature is the null morpheme *-Ø*, which appears when the root is essentially a free morpheme that ends in a phonotactically licit sequence allowed by the syllable structure of the language. It most

[2] I take the Harris (1983: 91-93) definition that word markers are terminal elements that occur at word level and outside of any derivational morphemes. In some analyses word markers might also be interchangeably referred to as theme vowels. However, I use word markers throughout this paper to avoid confusion between those that are clearly vowels in comparison to the null morpheme *-Ø*.

[3] The difference between word markers *-o* and *-u* arises largely from historical reasons that I do not consider here. For more information I refer the reader to Ferreiro (1999) for Galician, García Arias (2003) for Asturian, Penny (2002) for Spanish, and Williams (1968) for Portuguese.

commonly occurs when the word ends in a consonant[4] to be consistent with the way we denote vocalic word markers on other nouns.

(1)	a.	**-e:**	carne$_{F}$ *'meat'*; alambre$_{M}$ *'wire'*	Spanish
		-a:	mesa$_{F}$ *'table'*; mapa$_{M}$ *'map'*	
		-o:	mano$_{F}$ *'hand'*; libro$_{M}$ *'book'*	
		-Ø:	luz$_{F}$ *'light'*; papel$_{M}$ *'paper'*	
	b.	**-e:**	carne$_{F}$ *'meat'*; arame$_{M}$ *'wire'*	EP
		-a:	mesa$_{F}$ *'table'*; mapa$_{M}$ *'table'*	
		-o:	mão$_{F}$ *'hand'*; livro$_{M}$ *'book'*	
		-Ø:	luz$_{F}$ *'light'*; papel$_{M}$ *'paper'*	
	c.	**-e:**	carne$_{F}$ *'meat'*; arame$_{M}$ *'wire'*	Galician
		-a:	mesa$_{F}$ *'table'*; mapa$_{M}$ *'map'*	
		-o:	tribo$_{F}$ *'tribe'*; libro$_{M}$	
		-Ø:	luz$_{F}$ *'light'*; papel$_{M}$ *'paper'*	
	d.	**-e:**	carne$_{F}$ *'meat'*; alambre$_{M}$ *'wire'*	Asturian
		-a:	mesa$_{F}$ *'table'*; mapa$_{M}$ *'map'*	
		-u:	manu$_{F}$ *'hand'*; llibru$_{M}$ *'book'*	
		-Ø:	lluz$_{F}$ *'light'*; papel$_{M}$ *'paper'*	

Not included in (1) are exceptional cases like *u*-nouns (cf. *tribu 'tribe'*) or foreign *i*-nouns (cf. *taxi 'taxi'*) in Spanish, shortened *o*-nouns in general Romance (cf. *moto 'bike' f*rom *motocicleta 'motorcycle'*), or the mass marker *-o* on some masculine Asturian nouns (cf. *pelo 'hair'* but *pelu 'a hair'*, see ALlA 2001; d'Andrés 1993; Arias Cabal 1998 & Burner 2023, among others, for discussion). I leave aside these exceptions but discuss them as necessary and where relevant in the context of grammatical gender in this article. While there is no consensus in the field as to how we must approach the distribution of examples in (1), in this paper I will adopt DM as the main framework for different reasons (§2). First, it allows us to consider the internal structure of nouns, their nodes, and the features found on them. Second, though some operations do occur post-syntactically, a very solid DM-based approach has already been applied to the morphosyntax of gender in various languages (Kramer 2015).

1.1. A Brief Statement on Languagehood

West Iberian refers to a language continuum including languages from the western region of the Iberian Peninsula. Within this continuum we find Spanish, EP, Galician, Asturian, Leonese, and Mirandese, to name just a few. Additionally, this paper mainly looks at grammatical gender in Spanish, EP, Galician and Asturian. Of those listed, Asturian is a minoritized language from the Principality of Asturias in northern Spain. Though some may call its status as a language into question due to its lack of officiality,

[4] It may also appear in the context of glides or accented vowel endings (cf. llei-Ø *'law'* or café-Ø *'coffee'* in Asturian).

both in Asturias and in Spain, I will not debate this socio-political issue. The fact of the matter is that Asturian is an underrepresented and somewhat understudied West Iberian language whose major varieties can be classified as West, Central and East Asturian. Furthermore, Central Asturian is considered the standard of these varieties, though there is a great deal of microvariation found across the Principality in general (see Ridruejo 2005). In sum, this paper aims to consider grammatical gender purely from a linguistic perspective that accounts for the typological characteristics as they apply to the languages included herein.

1.2. This Structure of this Paper

In section two I briefly summarize different theoretical approaches to noun form and gender with the aim of adopting DM as the basis for the theoretical framework in this paper. I provide an application of DM on Spanish and Asturian (Kramer 2015 & Burner 2023). The purpose of this is to demonstrate the basic functions of this framework in anticipation of an application to EP and Galician in subsequent sections. Section three considers previous morphophonological accounts as a springboard for how EP and Galician nouns can be organized into different theme classes (Sousa e Silva 2020; Martínez-Gil 2022 & Villalva 2008). I then undertake an account of noun derivation and its relation to grammatical gender in EP and Galician based on the Spanish and Asturian summary in the section prior. Section four summarizes key points that were introduced in each section of this paper and pinpoints a path forward for future work on the typology of grammatical gender in West Iberian.

2. Theoretical Bits and a Basis in Spanish and Asturian

2.1. Morphophonological Accounts of Noun Form and Gender

Two earlier theoretical approaches to noun form and gender in Spanish are outlined in previous work by Bermúdez-Otero (2013) and Harris (1992). While these two authors' analyses slightly differ, they achieve a similar outcome in that they categorize both feminine and masculine Spanish nouns into classes in relation to their form and gender. On one hand, Bermúdez-Otero (2013) argues that roots and markers are stored together as one stem, with the main result being *o*-stems, *a*-stems and *e*-stems. On the other hand, Harris's (1992) work is root-based in that roots and word markers are joined via derivational processes. Furthermore, he proposes five different theme classes for Spanish nouns. The relevant details from both authors' work are summarized below in Figure 1.

Figure 1. Comparing Harris (1992) and Bermúdez-Otero (2013)

Examples	Harris (1992)	Bermúdez-Otero (2013)
lío 'muddle', *mano 'hand'*, …	I	*o*-stems
día 'day', *cana 'gray hair'*, …	II	*a*-stems
jefe 'boss', *as 'ace'*, *pase 'pass'*, …	III	*e*-stems
tórax 'thorax', *dosis 'dose'*, …	IV	athematic stems
taxi 'taxi', *tribu 'tribe'*, …	V	

Class name differences aside, nouns ending in *-o, -a*, *-e*, and a consonant, in Figure 1, are similarly grouped by these authors.[5] Furthermore, the Harris CLASS IV nouns ending in the sequence *-(V)s*, which are also invariable in the singular and plural, and his CLASS V group of foreign words, are both considered athematic stems by the Bermúdez-Otero account. While the Harris (1992) and Bermúdez-Otero (2013) analyses do capture the general distribution of Spanish noun form and gender, questions remain about their overall application to the data.

First, under Bermúdez-Otero (2013) the stem's word marker is deleted under derivation involving augmentative and diminutive suffixes, in (2) and (3), respectively. This deletion rule is used to explain why these suffixes seem to possess their own word marker that inherits and reflects the stem's gender final vowel (Bermúdez-Otero 2013: 19). However, there is no marker deletion for regional varieties that say *manito 'little hand'*, in (3), where instead it is argued that the diminutive suffix -ít- appears as an infix inserted between the root and the marker to explain the preservation of *-o* in this case.[6]

(2) Augmentative Suffixes (adapted from Bermúdez-Otero 2013: 20)

[mán-o]	[man-áθ-a]
hand-THV$_o$[F]	hand-AUG-THV$_a$[F]
'hand'	*'large hand'*

(3) Diminutive Suffixes (adapted from Bermúdez-Otero 2013: 20)

[mán-o]	[man-ít-a]	[man<ít>-o]
hand-THV$_o$[F]	hand-DIM-THV$_a$[F]	hand<DIM>-THV$_o$[F]
'hand'	*'little hand'*	*'little hand'*

[5] I note that Harris's CLASS III and Bermúdez-Otero's *e*-stems have differently named subclasses, but they ultimately group nouns ending in *-e* or consonant the same. For example, Harris proposes CLASS IIIA where the noun either ends in *-e* for phonotactic well-formedness, cf. *madre 'mother'* not **madr 'madre'*, or in a consonant, cf. *luz-Ø 'light'*. His CLASS IIIB includes nouns that should have a phonotactically well-formed stem without any type of vowel marker, yet an *-e* is still present, *pase 'pass'* and not **pas 'pass'*. For Bermúdez-Otero, CLASS IIIA and CLASS IIIB are instead called ordinary *e*-stems and *e*-only stems, respectively.

[6] It is also unclear how Bermúdez-Otero (2013) would account for other regional uses of Spanish, like *manotazo 'a strong slap/swat with a hand'*, where it appears that the stem has maintained its marker (compare *sarten 'frying pan' > sartenazo 'blow struck with a frying pan'*, cf. Bermúdez-Otero (2013: 20).

Second, looking to Harris (1992: 68), for CLASS II nouns there is a redundancy rule in which CLASS II marker *-a* is linked the exponence of feminine gender in Spanish. The feminine noun *mano 'hand'*, however, cannot be explained by this rule because it ends in the CLASS I marker *-o*. While Harris leaves this matter open, the following are two possible reasons that he offers to explain this exceptional case. One option is that the output is *mano* and not **mana* due to some failure in the F → CLASS II redundancy rule. A second path might be that √MAN is stored with *-o*, an assumption that is more in line with Bermúdez-Otero's (2013) view.

Given the above facts, it is uncertain why we should accept that stems contain their word markers if it is deleted in some cases (cf. the augmentative *manaza* in (2)) but not in other cases (cf. the diminutive *manito* in (3)). Furthermore, it stands to reason that we should be working toward an analysis that not only generally captures the Spanish data, but rather one that can also account for known exceptions in a more consistent way (cf. *mano 'hand'*). In fact, other work that is based more in the syntactic properties of noun form and gender appear to remedy these open questions (Fábregas 2024 and Kramer 2015). I now turn to a summary of their work in the following subsections.

2.2. Spanish Nouns and Gender from a Nanosyntax Perspective

Fábregas (2024: 74-84) couches his analysis in Nanosyntax, aiming to provide an account for noun form and gender realization in a way that respects purely syntactic methods. One major component his model are the nine noun classes proposed therein. These classes, included in example (4), represent the distribution of nominal gender across noun forms in Spanish[7]

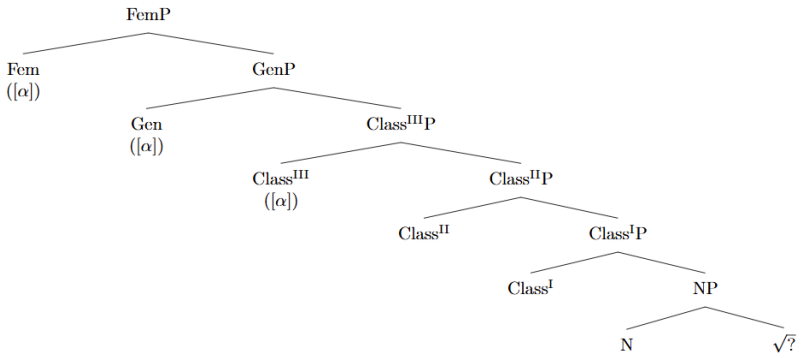
(4) a. fixed gender masculine *-o*, cf. *vaso 'glass'*
b. fixed gender feminine *-a*, cf. *ventana 'window'*
c. gender variable *-o*/*-a*, cf. *gato 'male cat'* / *gata 'female cat'*
d. fixed gender masculine *-a*, cf. *problema 'problem'*
e. gender variable *-a*, cf. *el/la colega 'the male/female colleague'*
f. gender unmarked *-e*/consonant, cf. *coche 'car'; pared 'wall'*
g. variable gender unmarked *-e*/consonant, cf. *el/la juez 'the male/female judge'*
h. fixed gender feminine *-o*, cf. *mano 'hand'*
i. gender variable feminine *-o*, cf. *testigo 'witness'*

I now move to the author's basic structural assumptions shown in (5). First, in general terms, directly dominating a classifier domain is a gender domain that consists of FemP and GenP. GenP copies and makes interpretable any gender features found in the classifier domain onto its Gen head, specifically [α], which equates to what is traditionally referred to as feminine gender (Fábregas 2024: 44). Second, FemP is projected above GenP in the context of gender variable nouns that are semantically interpreted as feminine (cf. *gata 'female cat'* in (4c)). Finally, within the classifier domain we find Class^{III}P, Class^{II}P, and

[7] I note that (4f) and (4g) nouns can also end in a vowel other than *-o* and *-a*, and that an additional variant of (4g) is also *la jueza 'the female judge'*.

Class^{I}P, where Class^{III}P may contain a [α] feature.[8] The order of the Classifier Phrases is also such that a higher Class Phrase may not be projected without a lower Class Phrase complement, i.e. Class^{I}P must be present for Class^{II}P to dominate it.

(5) Basic Nanosyntactic Structure (Fábregas 2024)[9]



For the author, *-o* and *-a* are the only gender exponents in Spanish and *-e* is not a gender morpheme, but rather it only appears epenthetically in certain contexts for syllabicity (Fábregas 2024: 78). Spell-out occurs under the author's proposal based on two main stipulations: **(i)** the projection or omission of certain phrases shown in (5), and **(ii)**, the specification of which areas within the structure trigger spell-out, especially in what seem to be exceptional cases. Also recall that GenP is involved with different agreement operations, FemP appears when nouns have a female referent, and a gender feature, [α], can be present on Class^{III}, Gen or Fem (Fábregas 2024: 67-69). With these details in mind, I now turn to a brief description of the author's structural assumptions. I will begin with *-o* form nouns, followed by *-a* form nouns, and finally, nouns that have no exponent according under the author's view.[10]

The *-o* in fixed gender masculine nouns and gender variable nouns (cf. *vaso 'glass'*; *gato 'male cat'*) have the underlying structure in (6). Here the exponent *-o* is spelled out under Gen and Class^{I}P and in the absence of any gender feature (Fábregas, 2024: 56).

(6) ***vaso 'glass' / gato 'male cat'***

[GenP [NP vas-] [Gen [Gen] [Class^{I}P [Class^{I}] [~~NP~~]]]]
-o

[GenP [NP gat-] [Gen [Gen] [Class^{I}P [Class^{I}] [~~NP~~]]]]
-o

[8] For instance, [α] would be present on Class^{III} for a fixed gender feminine noun like *mesa 'table'*, where the feminine gender is interpretable but copied onto GenP for gender agreement purposes (Fábregas 2024: 64; 78).

[9] Here I use ([α]) solely to show on what heads gender may appear.

[10] The author uses square boxes in the original text to indicate which parts of the structure are relevant for spell-out. In examples (6) through (15), I instead use curly brackets.

Fixed gender feminine nouns that end in *-a* (cf. *ventana 'window'*), in (7), require that the classifier domain project up to Class^{III}P. This Class^{III}P contains a gender feature that is then copied onto Gen.

(7) ***ventana 'window'***

[$_{GenP}$ [$_{NP}$ ventan-] [$\underbrace{\text{[}_{Gen}\ \text{[}_{Gen\ [\alpha]}\text{]}\ \text{[}_{Class^{III}P}\ \text{[}_{Class^{III}\ [\alpha]}\text{]}\ \text{[}_{Class^{II}P}\ \text{[}_{Class^{II}}\ \text{]}\ \text{[}_{Class^{I}P}\ \text{[}_{Class^{I}}\ \text{]}}_{-a}$ [$_{\not{NP}}$]]]]]]

In (8), gender variable feminine *-a* nouns (cf. *gata 'female cat'*; *jueza 'female judge'*) are like their male counterparts (cf. (6)) in that the classifier domain only contains Class^{I}P. However, the gender domain contains a FemP for female biological sex reference and a GenP for syntactic agreement, and there is a gender feature under each of these phrases.

(8) ***gata 'female cat' / jueza 'female judge'***

[$_{FemP}$ [$_{NP}$ gat-] [$\underbrace{\text{[}_{Fem}\ \text{[}_{Fem\ [\alpha]}\text{]}\ \text{[}_{GenP}\ \text{[}_{Gen\ [\alpha]}\text{]}\ \text{[}_{Class^{I}P}\ \text{[}_{Class^{I}}\ \text{]}}_{-a}$ [$_{\not{NP}}$]]]]]

[$_{FemP}$ [$_{NP}$ juez-] [$\underbrace{\text{[}_{Fem}\ \text{[}_{Fem\ [\alpha]}\text{]}\ \text{[}_{GenP}\ \text{[}_{Gen\ [\alpha]}\text{]}\ \text{[}_{Class^{I}P}\ \text{[}_{Class^{I}}\ \text{]}}_{-a}$ [$_{\not{NP}}$]]]]]

A noun like *colega 'female colleague'*, in (9), does not vary in form. It does, however, vary in gender. Here the projection of Class^{II}P in combination with GenP and FemP in the gender domain accounts for the spell-out of *-a*.

(9) ***la colega 'the female colleague'***

[$_{FemP}$ [$_{NP}$ √ROOT] [$\underbrace{\text{[}_{Fem}\ \text{[}_{Fem\ [\alpha]}\text{]}\ \text{[}_{GenP}\ \text{[}_{Gen\ [\alpha]}\text{]}\ \text{[}_{Class^{II}P}\ \text{[}_{Class^{II}}\ \text{]}\ \text{[}_{Class^{I}P}\ \text{[}_{Class^{I}}\ \text{]}}_{-a}$ [$_{\not{NP}}$]]]]]]

I now move towards the exceptional cases discussed by the author. First, we have masculine nouns that end in *-a*, like *problema 'problem'* and *el colega 'male colleague'*, in (10). Class^{II}P is also present in the classifier domain for these nouns, but the underlying structure lacks gender features (compare *la colega 'female colleague'* in (9)). This explains the masculine value of these nouns and the appearance of the *-a* exponent.

(10) ***problema 'problem' / el colega 'the male colleague'***

[$_{GenP}$ [$_{NP}$ problem-] [$\underbrace{\text{[}_{Gen}\ \text{[}_{Gen}\ \text{]}\ \text{[}_{Class^{II}P}\ \text{[}_{Class^{II}}\ \text{]}\ \text{[}_{Class^{I}P}\ \text{[}_{Class^{I}}\ \text{]}}_{-a}$ [$_{\not{NP}}$]]]]]

More interesting, however, is the way that the author addresses nouns that end in *-e* or a consonant (cf. *coche 'car'*; *el juez 'male judge'*). Recall that Fábregas' view is that *-e* is merely an epenthetic vowel and does not share word marker status with *-o* and *-a*. In these cases, spell-out occurs across the gender and classifier domain as with other nouns, but it also includes the noun complex. This is shown for the nouns *coche 'car'* and *el juez 'male judge'* in (11).[11]

(11) ***coche 'car' / el juez 'the male judge'***

$$\underbrace{[_{\text{GenP}}\,[_{\text{Gen}}\,]\,[_{\text{Class}^{\text{I}}\text{P}}\,[_{\text{Class}^{\text{I}}}\,]\,[_{\text{NP}}\,\text{coch(e)}]]]}_{\textit{coche}}$$

$$\underbrace{[_{\text{GenP}}\,[_{\text{Gen}}\,]\,[_{\text{Class}^{\text{I}}\text{P}}\,[_{\text{Class}^{\text{I}}}\,]\,[_{\text{NP}}\,\text{juez}]]]}_{\textit{juez}}$$

The underlying structure of *la juez 'female judge'*, in (12), is like that of *el juez 'male judge'*, in (11), in that the NP is also included in the spell-out domain. The difference, however, is that the female referring noun also contains FemP and GenP.

(12) ***la juez 'the female judge'***

$$\underbrace{[_{\text{FemP}}\,[_{\text{Fem}\,[\alpha]}]\,[_{\text{GenP}}\,[_{\text{Gen}\,[\alpha]}]\,[_{\text{Class}^{\text{I}}\text{P}}\,[_{\text{Class}^{\text{I}}}\,]\,[_{\text{NP}}\,\text{juez}]]]]}_{\textit{juez}}$$

As for *pared 'wall'*, in (13), fixed gender feminine nouns that carry no word marker have the underlying structure shown in (13). These nouns resemble that of marker-bearing fixed gender feminines (cf. *ventana 'window'* in (7)). However, like the examples in (11) and (12) above, the noun complex is also included in spell-out.

(13) ***pared 'wall'***

$$\underbrace{[_{\text{GenP}}\,[_{\text{Gen}}\,]\,[_{\text{Class}^{\text{III}}\text{P}}\,[_{\text{Class}^{\text{III}}\,[\alpha]}]\,[_{\text{Class}^{\text{II}}\text{P}}\,[_{\text{ClassII}}\,]\,[_{\text{Class}^{\text{I}}\text{P}}\,[_{\text{Class}^{\text{I}}}\,]\,[_{\text{NP}}\,\text{pared}]]]]]}_{\textit{pared}}$$

Finally, there are also exceptional cases where the noun is feminine or female referring, yet it bears the exponent *-o* that is typically associated with Class$^{\text{I}}$ masculine nouns. For example, *mano 'hand'* and *testigo 'witness'*, in (14) and (15) respectively, the author argues that the noun complex and gender domain are spelled out, but with only part

[11] The proposed structural distribution for this type of noun does not make it clear if the NP also moves up to adjoin to the highest gender-bearing phrase in these cases. For this reason, in examples (11) though (13) the bracket notation shows the noun in the same position as the source examples (Fábregas 2024: 78; 80).

of the classifier domain. The *-o* exponent is therefore a product of spell-out by only Class^{I}P (Fábregas 2024: 81-83).[12] Furthermore, the inclusion of Class^{III}P in (14) accounts for the feminine agreement that accompanies *mano 'hand'*. In (15), FemP accounts for the female referring *testigo 'witness'*.

(14) ***mano 'hand'***

[$_{GenP}$ [$_{NP}$ man-] [$_{Gen}$ [$_{Gen}$] [$_{Class^{III}P}$ [$_{Class^{III}}$ [α]] [$_{Class^{II}P}$ [$_{Class^{II}}$] [$_{Class^{I}P}$ [$_{Class^{I}}$] *-o*] [$_{\not NP}$]]]]]]

(15) ***testigo 'witness'***

[$_{FemP}$ [$_{NP}$ testig-] [$_{Fem}$ [$_{Fem}$ [α]] [$_{GenP}$ [$_{Gen}$ [α]] [$_{Class^{I}P}$ [$_{Class^{I}}$] *-o*] [$_{\not NP}$]]]]]

To briefly summarize, the Fábregas (2024) proposal involves about six different syntactic projections (see examples (6)-(15)). It also assumes a variety of spell-out domains to account for what is a distribution of nine Spanish noun types according to the author. While the data are borne out by the author's structural assumptions, I call into question some aspects of the analysis. Namely, in some respects, a nanosyntactic approach in this manner lacks some uniformity across the data. First, different nouns have a different underlying structure to account for gender and form distribution (cf. *vaso 'glass'* and *ventana 'window'* in (6) and (7)). Second, spell-out also varies across nouns insomuch as it is activated across different domains depending on how the noun ends. For example, the nominal domain is not included in spell-out when a word marker is present, but it is included when there is no marker (compare *la jueza 'female judge'* in (8) and *la juez 'female judge'* in (12)). Finally, for nouns like *mano 'hand'*, which have traditionally been considered exceptional even in the Harris (1992) and Bermúdez-Otero (2013) sense (see §2.1). However, we move further from structural uniformity if we opt for an account that further subdivides the spell-out domain to capture these types of exceptions (cf. example (14)).

DM is the final syntactic approach that I will consider here. In fact, it is the framework that I will apply to the West Iberian data that I focus on in this paper. Though we will see that DM is also not without its stipulations, in the next subsection I will show that it is a more elegant approach to capturing West Iberian form and gender for two main reasons. First, the underlying structure of nouns is treated uniformly, and second, though rule-based, the spell-out of word markers happens predictably across examples.

2.3. A DM Account of Spanish and Asturian Nominal Gender

The side-by-side comparison in Figure 2 between Fábregas (2024) and Kramer (2015) shows that while there are similarities in their analyses, there are still slight variations in their approach. For instance, Kramer (2015) proposes more gender exponents and the focus

[12] Other structural assumptions are made to differentiate the diminutives *manita 'little hand'* versus *manito 'little hand'* (see Fábregas 2024: 82-83, cf. (94) and (97)).

shifts more towards the three theme classes of nouns instead of the projectable Class Phrases that interact with spell-out found in Fábregas (2024). There are also other different structural assumptions that Kramer (2015) makes, which I will further develop in this subsection. Following this, I summarize work that applies her DM approach to data in Asturian (Burner, 2023).

Figure 2. Comparing Fábregas (2024) and Kramer (2015)

Fábregas (2024) - *Nanosyntax*	Kramer (2015) - *Distributed Morphology*
(i) two exponents (*-o, -a*)	(i) four exponents (*-o*, *-a*, *-e*, *-Ø*)
(ii) focus on nine noun classes	(ii) focus on three noun classes
(iii) class as ClassP	(iii) class as theme nodes
(iv) masculine is the absence of gender	(iv) masculine is a [-FEM] feature
(v) gender value is [α]	(v) gender value is [±FEM]
(vi) gender on Fem, Gen, or Class^{III}	(vi) gender on *n*
(vii) spell-out is phrasal	(vii) spell-out is on individual nodes
(viii) spell-out conditioned by class/gender	(viii) spell-out conditioned by root or *n* feature

The DM framework is often considered in comparison to how Lexicalism views nominal gender. Lexicalism, however, is less economical than DM because it takes nouns to be fully formed words that contain their gender and any other relevant features. For example, the Spanish nouns *cesta 'basket'* and *cesto 'basket [bigger/taller/wider]'*, under lexicalism, are stored separately in the mental grammar (see (16)).

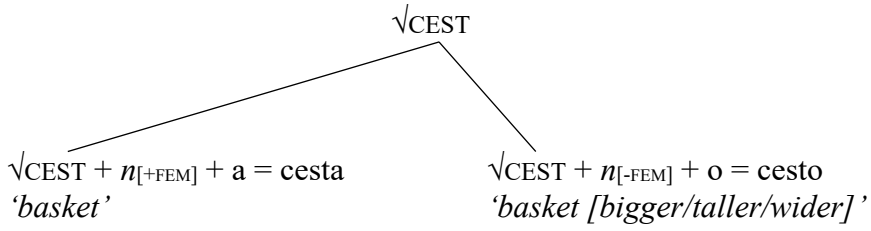
(16) Nouns as separate lexical entries

cesta$_{FEM}$	cesto$_{MASC}$
'basket'	*'basket [bigger/taller/wider]'*

In DM, however, there is no Lexicon in the traditional sense referenced above and in (16). Instead, syntactic processes are distributed across the mental grammar where information is stored in, and accessed from, different lists. Example (18) is a representation of the nouns *cesta*/*cesto* under the lexically decomposed view that accompanies DM, where the root, gender-bearing *n*, and the word markers *-a* and *-o* are shown as separate components of the noun.[13]

[13] See Burner (2022) for a comparative take on other cases of gender and meaning shift in Asturian and Spanish.

(17) Nouns under lexical decomposition



An anonymous reviewer posed a very interesting question related to same root Spanish nouns that may or may not be semantically related and how we might uniformly account for them morphosyntactically. Take the examples in (18) and (19) that were provided by the reviewer. The nouns *pito 'horn'* and *pita 'pita fiber'* in (18) appear to share a root, but their meanings are not semantically related. However, the minimal pairs in (19) appear to share a root, and in this case, their semantic interpretation is related but specifically in the context between each member of the same pair.[14]

(18) no semantic relation

a. pito *'horn'*
b. pita *'pita fiber'*

(19) certain semantic relation (pair specific)

a. calvo *'bald'*
b. calva *'bald patch [of hair]'*
c. manzano *'apple tree'*
d. manzana *'apple'*
e. barco *'boat'*
f. barca *'boat [smaller than 'barco']*

Both lexicalism and lexical decomposition provide separate answers to this open question, but as previously mentioned, one approach is more economical than the other. If we were to treat the nouns in (18) and (19) as lexical items complete with their gender features and meaning, there would be eight different items stored in the lexicon. Furthermore, any forms derived from these words, in (20), would also be separate, fully formed lexical items. This would yield a total of twelve separate lexical entries across the examples in (18) through (20)

(20) a. pital *'pita fiber field'*
b. calvete *'baldy'*
c. manzanar *'apple grove/apple tree'*
d. barquero *'boat owner'*

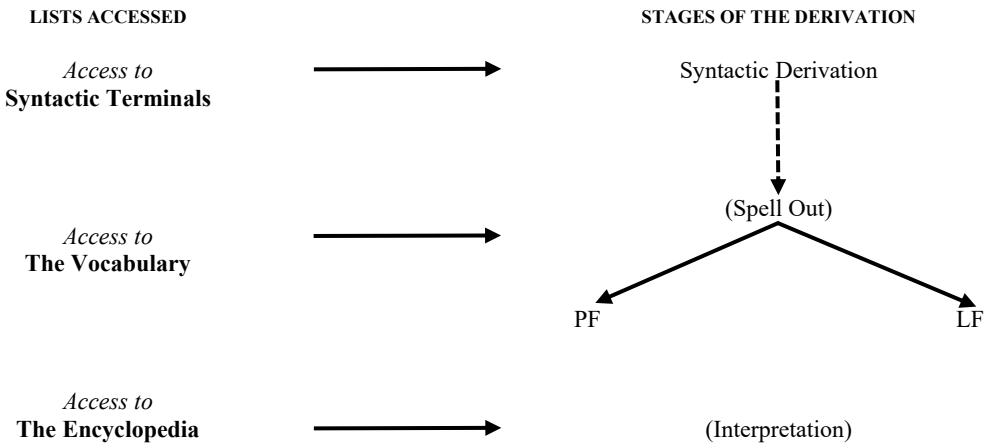
Through DM, a lexically decomposed view would reduce these twelve individually and fully stored nouns down to just four roots: √PIT, √CALV, √MANZAN, and √BARC. The main point that I make here is that DM is more economical than a lexicalist approach because there are multiple outputs from the same few roots. Once derived, semantic

[14] To clarify the notion of pair contextual semantic interpretation, *calva 'bald patch [of hair]'* versus *calvo 'bald'* share the semantic context regarding having a lack of hair. In other words, there is no semantic relation, or perhaps just a weaker one, between *calva 'bald patch [of hair]'* and *calvo 'bare [no vegetation]'*.

relatedness (cf. *calvo 'bald' / calva* '*bald patch [of hair]'*) or any cases of polysemy (*pito 'horn'* / *pita 'pita fiber'*) are worked out by the list of definitions stored in the Encyclopedia. In other words, independent of the phonological form that the root[15] takes, teasing out differences in meaning is unproblematic for DM because the noun's interpretation applies after the word is derived. In addition to any economic reasons in favor of DM, the framework also takes a rather elegant approach to nominal gender and its relation to word markers.

The general idea behind is that an individual possesses a mental grammar. This is where information is stored in lists that get accessed at different points in the syntactic derivation, see Figure 3 below. These lists include **(i)** Syntactic Terminals, which are nodes that can contain features and the place where the spell-out of morphemes can occur, **(ii)** the Vocabulary, the actual morphemes themselves, or Vocabulary Items, that are inserted via phonologically conditioned rules, and **(iii)**, the Encyclopedia, where definitions and meaning related to a given world based on the speaker's world experience are stored.

Figure 3. Grammar and Lists (Embick 2015: 20)

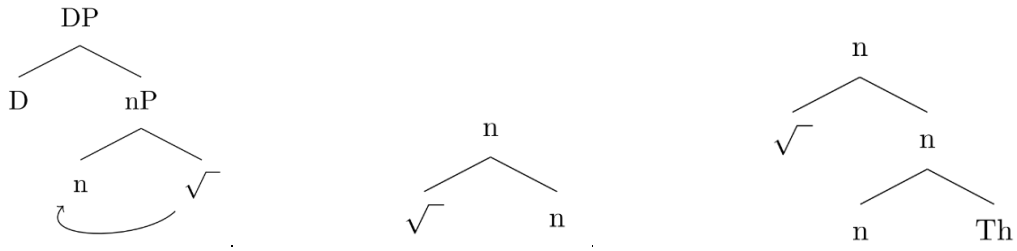


Through DM and Minimalism (Burner 2023; Chomsky 1995; Embick 2010, 2015; Halle & Marantz 1994; Kramer 2015, 2016; and Oltra-Massuet 1999; Oltra-Massuet & Arregi 2005; among many others) there are also some assumptions that interact with the basic schema in Figure 3 from a noun-internal approach. Within this framework nouns are *n*Ps that are composed mainly of three different nodes that form a complex head: the root, a *n* head, and a theme node. The √ROOT and *n* node are first linearized syntactically via the root adjoining to the left of *n* in (21a) to form a complex head in, (21b). The Theme Node is post-syntactically inserted in (21c), and this is conditioned either in the context of the

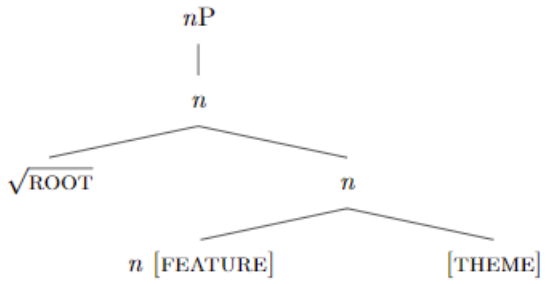
[15] The field is not in agreement on how we should analyze roots, but there are different approaches that are working towards an answer. The first of these is that roots are devoid of any content whatsoever (Borer 2013: 380). According to Embick (2015: 7-8), roots have an underlying phonological representation in some cases (cf. √CAT is underlyingly /kæt/), but in other cases, there might instead be root indexing (cf. $\sqrt{BANK}_{254}$ = *'financial institution'* versus $\sqrt{BANK}_{879}$ = *'river shore'*). I follow Kramer's (2015: 9) account that roots are indexed and compete for insertion at PF, and they are interpreted by the Encyclopedia according to the context.

gender feature on *n* or the root. An abstract representation of the *n*P is depicted in (22) after node linearization and theme node insertion takes place.

(21) a. b. c.



(22) Abstraction of *n*P



In (22) the *n* not only nominalizes the uncategorized root. In addition to this *n* is also the locus of gender (Kramer 2015), which is abstractly indicated by [FEATURE]. Furthermore, Kramer's work has also evidenced that the number of *n*s can also vary across languages, leaving room for the undertaking of much more cross-linguistic research. DM also assumes the Late Insertion of Vocabulary Items, in which these items are not spelled out until after the syntax applies (see Halle 1997). Word markers, a kind of Vocabulary Item, are in competition and are therefore inserted onto the [THEME] node through rule-based insertion, and these rules are ordered from most to least specific. Rule ordering is also such that the correct word marker obligatorily appears in the most specific context first, and contextual marker insertion is based on *n*'s gender or the root (see Embick 2010 on inward sensitivity). Finally, one's interpretation of the noun is due to listed definitions contained within the Encyclopedia, which is also influenced by an individual's world view and experiences. I now take the reader through a direct application of DM to Spanish and Asturian to clarify the above-mentioned characteristics.

Prior work on Spanish and Asturian clearly develops a path forward to examine noun form and grammatical gender in West Iberian from a DM perspective. More specifically, this approach will allow us to more clearly consider the distribution of word markers that appear with both feminine and masculine nouns, as (23) demonstrates.

(23) a. Spanish

-e:	carne$_{F}$ *'meat'*; alambre$_{M}$ *'wire'*; …
-a:	mesa$_{F}$ *'table'*; mapa$_{M}$ *'map'*; …
-o:	mano$_{F}$ *'hand'*; libro$_{M}$ *'book'* …
-Ø:	luz$_{F}$ *'light'*; papel$_{M}$ *'paper'*; …

b.	**-e:**	carne$_{F}$ *'meat'*; alambre$_{M}$ *'wire'*; …	Asturian
	-a:	mesa$_{F}$ *'table'*; mapa$_{M}$ *'map'*; …	
	-u:	manu$_{F}$ *'hand'*; llibru$_{M}$ *'book'*; …	
	-o:	fierro$_{M}$ *'iron'*; pelo$_{M}$ *'hair'*; filo$_{M}$ *'thread'*; …	
	-Ø:	lluz$_{F}$ *'light'*; papel$_{M}$ *'paper'*	

Kramer (2015) proposed a thorough morphosyntactic account of the locus of gender in her book that also dedicated a section to a case study on Spanish. This case study is what formed the basis for Burner's (2023) dissertation on Asturian noun form and meaning, which was also extended to adjective agreement patterns. In §2.3.1. I summarize the key points of their work via a demonstration of noun derivation through DM. This summary will also serve as the basis for considering the same questions in EP and Galician in subsequent sections.

2.3.1. License That Noun!

Roots are uncategorized and must therefore be licensed by *n* to derive a noun. As shown in Figure 4 below, grammatical gender in the Spanish nominal system is such that four flavors of *n* are required to license the gender distribution of animate and inanimate nouns. Furthermore, feminine gender is considered the marked gender while masculine gender is considered a default.

Figure 4. Spanish n Licensers (adapted from Kramer 2015)

Spanish		
n i [+FEM]	→	hija *'daughter'*
n i [-FEM]	→	hijo *'son'*
n	→	hierro *'iron'*
n u [+FEM]	→	pera *'pear'*

Animate nouns in Spanish require a *n* with an interpretable [±FEM] feature because the biological sex of the noun's referent is relevant to gender assignment. The animate nouns *hija 'daughter'* and *hijo 'son'*, which share a root, are then differentiated by either [+FEM] or [-FEM]. While the focus of this paper is not on the gender properties of animate nouns, I wish to clarify a point that an anonymous reviewer made in relation to the topic. The nouns *hija 'daughter'* and *hijo 'son'* are licensed by *n i* [±FEM] when referring to their biologically sexed individual. However, *hijo 'child'* can be used in generic reference when no connection is established with a specific individual, in (24). Essentially, Spanish roots can be licensed by different flavors of *n*, and in (24), the root √HIJ is instead licensed by a *n* as a default masculine because it lacks gender features (Kramer, 2015: 93; 97). This same *n* also licenses default masculine nouns (cf. *hierro 'iron'*; Figure 4).

(24) Generic Reference to *hijo 'child'* (Kramer 2015: 93; cf. Roca 1989: 17)

sólo	tuvo	un	hijo	y	le salió	{niña/niño}
only	she.had	one.M	child	and	it turned.out	girl/boy

'She only had one child, and it was a girl/boy'

Finally, fixed gender feminine inanimate nouns require a *n* with an uninterpretable [+FEM] feature because these nouns are arbitrarily feminine and do not rely on their referent for gender assignment. The Spanish *n* system extends nicely to the Asturian one in Figure 5 with some additional explanation required. This is because we must account for Asturian varieties that do not morphologically indicate the mass interpretations of some nouns in addition to those varieties that do. Non-distinguishing Asturian has the exact same distribution of *n*s as Spanish, but distinguishing Asturian has an additional *n* at its disposal. In the latter of these two varieties some masculine inanimate nouns end in *-o* when interpreted as mass (cf. *fierro 'iron'*; *pelo 'hair'*; *filo 'thread'*), opposing the count interpretations that end in *-u* (cf. *fierru 'an iron object'*; *pelu 'a hair'*; *filu 'a thread'*). Outside of this special mass marking distinction, animate and inanimate nouns in Spanish and Asturian are licensed by different *n*s under similar conditions.

Figure 5. Asturian n Licensers (adapted from Burner 2023)

Non-Distinguishing Asturian			Distinguishing Asturian		
n i [+FEM]	→	fía *'daughter'*	*n i* [+FEM]	→	fía *'daughter'*
n i [-FEM]	→	fíu *'son'*	*n i* [-FEM]	→	fíu *'son'*
n	→	fierru *'an iron object'*	*n*	→	fierru *'an iron object'*
n u [+FEM]	→	pera *'pear'*	*n* [MASS]	→	fierro *'iron'*
			n u [+FEM]	→	pera *'pear'*

The *n*s in Figures 4 and 5 above only serve to categorize the root and serve as the locus for any gender or mass features that are relevant to the noun's derivation. The other part of the equation that we must now consider in §2.3.2. is how these *n* licensers might relate to Spanish and Asturian word markers.

2.3.2. I'd Like to Buy a Vowel

CLASS III Spanish nouns end in *-e* (cf. *vall-e 'valley'*; *torr-e 'tower'*), but the null *-Ø* marker appears in contexts where the syllabic structure allows for a consonant ending (cf. *papel-Ø 'paper'*; *luz-Ø 'light'*). The consonant endings in **vall* and **torr* are not permitted sequences and *-e* corrects their syllabic structure for this reason. However, *papel* and *luz* have phonotactically permitted consonant endings in Spanish and do not require *-e* (see Bermúdez-Otero 2013 and Harris 1991, 1992).[16] Aside from these particularities, CLASS II nouns end in *-a* (cf. *pas-a 'raisin'*; *map-a 'map'*) and CLASS I nouns in *-o* (cf. *libr-o 'book'*; *man-o 'hand'*). Therefore, the Spanish word marker inventory of *-e/-Ø*, *-a*, and *-o* is included in Figure 6.

[16] The difference between *-e* and *-Ø* in the context of word markers has caused different marker subdivisions in Bermúdez-Otero (2013) and Harris (1992) as I summarized in §2.1. However, I follow Kramer (2015: 236) in treating *-e/-Ø* as CLASS III word marker allomorphy.

Figure 6. Spanish Word Markers (adapted from Kramer 2015)

[THEME, III]	↔	*-e/-Ø*
[THEME, II]	↔	*-a*
[THEME, I]	↔	*-o*

Asturian, like Spanish, also has three theme classes and CLASS III and CLASS II nouns end in *-e/-Ø* (cf. *vall-e 'valley'*; *torr-e 'tower'*) and *-a* (cf. *pas-a 'raisin'*; *map-a 'map'*), respectively. However, some differences remain apparent in looking at Figure 7 below. For example, CLASS I nouns in general Asturian end in *-u* (cf. *llibr-u 'book'*; *man-u 'hand'*), but nouns of this class in distinguishing varieties can end in *-u* (cf. *fierr-u 'an iron object'*; *pel-u 'a hair'*; *fil-u 'a thread'*) or *-o* (cf. *fierr-o 'iron'*; *pel-o 'hair'*; *fil-o 'thread'*) depending on the count versus mass interpretation of the noun.

Figure 7. Asturian Word Markers (adapted from Burner 2023)

Non-Distinguishing Asturian			Distinguishing Asturian		
[THEME, III]	↔	*-e/-Ø*	[THEME, III]	↔	*-e/-Ø*
[THEME, II]	↔	*-a*	[THEME, II]	↔	*-a*
[THEME, I]	↔	*-u*	[THEME, I]	↔	*-u/-o*

The word markers in Figures 6 and 7 surface under a particular set of syntactic and phonological operations. First, a theme node is post-syntactically inserted after the root and *n* are merged. Second, the word markers are then spelled out onto the dissociated theme node through rule-based insertion, a process that I review in §2.3.3.

2.3.3. Please Read and Accept the Terms and Conditions

The phonological spell-out of word markers occurs under Late Insertion and is conditioned by the Subset Principle (Halle 1997). The general idea is that word marker insertion is competition based, and this competition is guided by insertion rules that are listed from most to least specific, and the most specific context must apply first. Furthermore, the winning word marker is inserted onto the theme node if all or some of the features match, or a specific context is met. Finally, the relevant information needed for word marker spell-out is either the feature on *n* or the context of the noun's root (Embick 2010).

This spell-out process is best demonstrated by the word marker mappings for Spanish in Figure 8. In the context of the roots specified in rule (ai) the word markers *-e* and *-Ø* are inserted. Rule (aii) accounts for any masculine nouns that end in *-a*, and rule (aiii) accounts for any feminine nouns that end in *-o*. Outside of these specified contexts rule (b) inserts *-a* when there is a [+FEM] feature on *n*, and rule (c) handles all unspecified and default masculine nouns that end in *-o*. The ordering of these rules is such that if we are in the context of √MAN, rule (aiii) must apply first and *-o* is spelled out. The output of this derivation is then *mano 'hand'* and not **mana 'hand'*, which is blocked despite the feminine gender feature on *n*.

Figure 8. Spanish Spell-Out Rules (adapted from Kramer 2015)

a. i. *-e/-Ø* ↔ √VALL, √TORR, √LUZ, √PAPEL, …
   ii. *-a* ↔ √MAP, …
   iii. *-o* ↔ √MAN, …
b. *-a* ↔ *n* [+FEM]
c. *-o* ↔ elsewhere

As expected, a similar rule-based approach also functions in Asturian to map word markers to the theme node. The simplest case involves the spell-out rules for non-distinguishing Asturian, as there is a one-to-one correspondence to the number of rules and their order for Spanish. What does change, however, is the inclusion of *-u*, which is also inserted for certain feminine nouns and default masculine nouns.

Figure 9. Non-Distinguishing Asturian Spell-Out Rules

a. i. *-e/-Ø* ↔ √VALL, √TORR, √LLUZ, √PAPEL, …
   ii. *-a* ↔ √MAP, …
   iii. *-u* ↔ √MAN, …
b. *-a* ↔ *n* [+FEM]
c. *-u* ↔ elsewhere

We can now easily explain word marker spell-out in distinguishing Asturian in consideration of Figures 8 and 9 above. However, before moving on to the spell-out rules it will be useful to first consider an example for clarification. Burner (2023) shows us that feminine mass noun *ropa 'clothing'* has the internal structure in (25).

(25) √ROP + *n u* $_{\{[+FEM],[+MASS]\}}$ + *-a* = ropa *'clothing'*

In (25) √ROP is nominalized by a *n* that contains the feature set {[+FEM],[+MASS]}, which is indicative of the noun's grammatical gender and mass interpretation. Let us recall that *-o* can serve as a mass morpheme in distinguishing Asturian, yet the word is *ropa 'clothing'* and not ***ropo***. Bearing this in mind, the ordering of the rules in Figure 10 clearly allows us to account for mass *-o* morphology without the fear of overgeneration.

Figure 10. Distinguishing Asturian Spell-Out Rules

a. i. *-e/-Ø* ↔ √VALL, √TORR, √LLUZ, √PAPEL, …
   ii. *-a* ↔ √MAP, …
   iii. *-u* ↔ √MAN, …
b. *-a* ↔ *n* [+FEM]
c. *-o* ↔ [MASS]
d. *-u* ↔ elsewhere

√ROP is not a contextual root under any of the sub-rules in (a). We then move on to rule (b), where *-a* is obligatorily inserted for two reasons: **(i)** there is a [+FEM] feature on

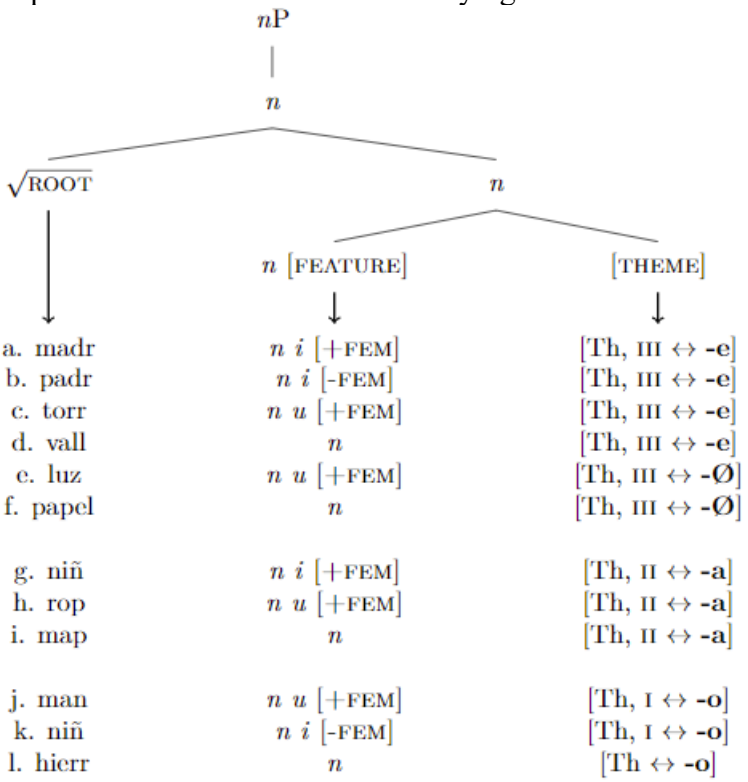
n, and **(ii)**, the Subset Principle is satisfied because [+FEM] alone satisfies feature matching and we need not consider the set {[+FEM],[+MASS]} in its entirety.[17] Since *-a* gets spelled out per rule (b) the output is *ropa 'clothing'* and **ropo* is blocked because the *-o* ↔ [MASS] rule in (c) would apply later. However, the *-a* would already be inserted on the theme node.

Having visited each checkpoint of noun derivation *a là* DM in isolation for Spanish and different varieties of Asturian, I include the relevant syntactic structure in §2.3.4. for the combination of these individual processes.

2.3.4. The End Product

If we combine the different operations detailed throughout the previous subsections we will arrive at the output in (26) for feminine and masculine Spanish nouns and their endings. This representation is a simplification, but it is designed to demonstrate how nouns are morphosyntactically derived and where word markers are phonologically inserted within the underlying structure, and in which contexts.

(26) Spanish Noun Derivation – Underlying Structure



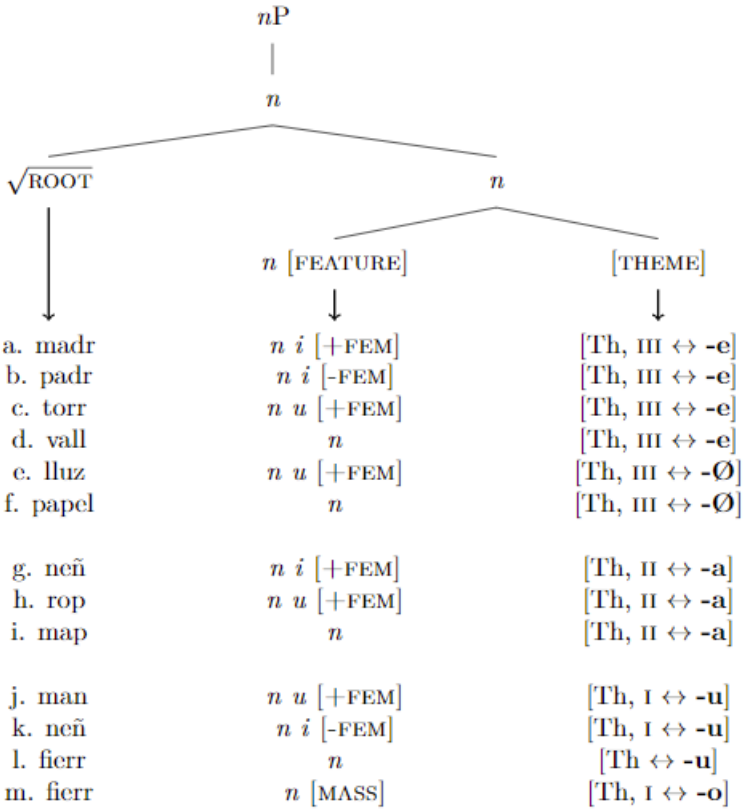
The *-e* or *-Ø* in (26a) through (26f) are all inserted in the context of the specified noun root (cf. Figure 8, rule (ai)). The *-a* in (26g) and (26h) are inserted due to the [+FEM] feature on *n* (cf. Figure 8, rule (b)), while in (26i) marker insertion occurs in the context of the root

[17] To clarify, we do not require a spell-out rule like *-a* ↔ {[+FEM],[MASS]} to generate *ropa 'clothing'* because targeting either one of the features in the set would satisfy word marker spell-out. This would be an overly specific rule that would only output feminine mass ending in *-a*. Instead, *-a* ↔ [+FEM] captures the general breadth of feminine nouns, especially because mass *-o* on feminine mass nouns in Asturian is unattested.

(cf. Figure 8, rule (aii)). Finally, *-o* insertion occurs in (26j) through (26l) for different reasons. The context for (26j) is √MAN (cf. Figure 8, rule (aiii)), and *-o* is spelled out in (26k) and (26l) via the Elsewhere Principle since no special rule applies here.

As one would expect we get a similar output for Asturian in (27), where I combine both non-distinguishing and distinguishing varieties under one structure for convenience. The CLASS III word markers in (27a) through (27f) are all spelled out in the context of their root (cf. Figures 9 & 10, rule (ai)). The *-a* in (27g) and (27h) are spelled out under the [+FEM] feature (cf. Figures 9 & 10, rule (b)) while (27i) is root-based insertion (cf. Figures 9 & 10, rule (aii)). Finally, (27j) occurs under root-based insertion (cf. Figures 9 & 10 (aiii)), (27k) and (27l) under the Elsewhere Principle (Figure 9, rule (c) & Figure 10, rule (d)), and (27m) in the context of a mass feature on *n* (cf. Figure 10, rule (c)).

(27) Asturian Noun Derivation – Underlying Structure



I wish to now emphasize the importance of DM given the theoretical frameworks that were discussed throughout this section. Though there is still a need to stipulate insertion rules in DM for the correct spell-out of work markers, what we mainly gain from this framework is the structural uniformity. For example, there is no need to project different underlying structures as there is in Nanosyntax (see §2.2). This is because the complex head containing the root, *n* and Theme Node is structurally the same across nouns and what changes is the feature specification on *n*. Furthermore, the system presented in §2.3 is particularly useful for exceptional nouns like *mano 'hand'*, as it can be derived just the same as all the other nouns. For these reasons, I adopt a DM approach and formalize the framework to address noun form and gender in EP and Galician in section three.

3. EP and Galician

Previous research on EP word markers (Sousa e Silva 2020; following Bisol 1998 and Villalva 2008; among others) has proposed four basic theme classes marked by *-a*, *-o*, *-e*, and *-Ø*, with a fifth class dedicated to athematic words. Figure 11 below shows the grouping of EP nouns across different theme classes in both the singular and the plural.

Figure 11. EP Theme Classes (adapted from Sousa e Silva 2020: 31)

-a THEME	*-o* THEME	*-e* THEME	*-Ø* THEME	ATHEMATIC
casa *'house'* ↓ casas *'houses'*	mito *'myth'* ↓ mitos *'myths'*	gaze *'gauze'* ↓ gazes *'gauzes'*	gás *'gas'* ↓ gazes *'gasses'*	lápis *'pencil'* ↓ lápis *'pencils'*
	mão *'hand'* ↓ mãos *'hands'*	vale *'valley'* ↓ vales *'valleys'*	casal *'couples'* ↓ casais *'couple'*	som *'sound'* ↓ sons *'sounds'*
		cone *'cone'* ↓ cones *'cones'*	leão *'lion'* ↓ leões *'lions'*	íman *'magnet'* ↓ ímans *'magnets'*
			pão *'bread'* ↓ pães *'breads'*	

Sousa e Silva's (2020) approach is largely inspired by Villalva (2008: 93-94), where a nominal root can select a word marker, *-a*, *-o*, *-e*, *-Ø*, or none, represented by **T̄** for athematic. We can see clearly that the schema in Figure 11 above is like Villalva's (2008) proposal for noun groupings in (29).

(29) EP Nominal Roots and Markers *First Pass* (adapted from Villalva 2008: 94)

-a: tema_{M} *'theme'*, perna_{F} *'leg'*; $\text{artista}_{\text{M/F}}$ *'artist'*
-o: olho_{M} *'eye'*; tribo_{F} *'tribe'*; $\text{modelo}_{\text{M/F}}$ *'model'*
-e: dente_{M} *'tooth'*; $\text{estante}_{\text{F}}$ *'bookshelf'*; $\text{agente}_{\text{M/F}}$ *'agent'*
-Ø: $\text{tractor}_{\text{M}}$ *'tractor'*; luz_{F} *'light'*; $\text{furriel}_{\text{M/F}}$ *'quartermaster'*
T̄: chapéu_{M} *'hat'*; mãe_{F} *'mother'*

The outcome is essentially the same no matter which author we adopt. Namely, the *-a* and *-o* classes behave similarly to other Ibero-Romance languages in that the plural is formed by adding *-s* (cf. *casa 'house'* → *casas 'houses'*; *mito 'myth'* → *mitos 'myths'*). The *-e* class members show the word marker *-e* regardless of singular or plural inflection (cf. *gaze 'gauze'* → *gazes 'gauzes'*). This differs from the *-Ø* class as an epenthetic *-e* appears only under plural inflection (cf. singular *gás 'gas'* but plural *gazes 'gasses'*).[18] Finally, the athematic class contains examples that do not have a marker regardless of number inflection (cf. singular and plural *lápis 'pencil/pencils'*).

Considering the DM approach to Spanish and Asturian (cf. §2.3), I propose that EP *-o* nouns are part of CLASS I and that the *-a* nouns are part of CLASS II. Recall that Kramer (2015) also considers *-e* and *-Ø* to be allomorph markers of CLASS III nouns (cf. fn. 16). At this juncture what we have is a restructuring of the nominal word markers in (29) from five to a total of four, as shown in (30).

(30) EP Nominal Roots and Markers *Second Pass* (adapted from Villalva 2008: 94)

-a: tema$_{M}$ *'theme'*, perna$_{F}$ *'leg'*; artista$_{M/F}$ *'artist'*

-o: olho$_{M}$ *'eye'*; tribo$_{F}$ *'tribe'*; modelo$_{M/F}$ *'model'*

-e/-Ø: dente$_{M}$ *'tooth'*; estante$_{F}$ *'bookshelf'*; agente$_{M/F}$ *'agent'*
tractor-Ø$_{M}$ *'tractor'*; luz-Ø$_{F}$ *'light'*; furriel-Ø$_{M/F}$ *'quartermaster'*

T̄: chapéu$_{M}$ *'hat'*; mãe$_{F}$ *'mother'*

Finally, we must take a closer look at what Sousa e Silva (2020) and Villalva (2008) treat as athematic nouns. Recall that *lápis 'pencil'*, *som 'sound'*, *íman 'magnet'*, *chapéu 'hat'*, and *mãe 'mother'* show no marker in the singular (cf. Figure 11 and example (29)). Therefore, these nouns were classified as athematic for two main reasons: **(i)** they show plural morphology by adding only *-s*, and **(ii)**, no epenthetic vowel appears in the plural like the *-Ø* marker examples (cf. *gás 'gas'* versus *gazes 'gasses'* in Figure 11).

Furthermore, there is an obvious relation between *-Ø* marker nouns and athematic nouns in that in the singular they can both end in a consonant. In addition to this, so-called athematic nouns can end in diphthongs (cf. *chapéu 'hat'*; *mãe 'mom'*), accented vowels (cf. *café 'coffee'*), or glides (cf. *rei 'king'*). These same contexts also yield nouns that are marked with *-Ø* in Asturian (cf. Burner 2023: 124-125). In EP, plural *-e* insertion is also a secondary problem for the Phonology that we can resolve in the context of roots that end in *-l*, *-N* or *-S* (Sousa e Silva 2020: 31). Therefore, I argue that EP nouns very clearly follow

[18] In a few different contexts nasal segments are deleted in EP, for example, nasal segments followed by a vowel under inflection (cf. *irmão/irmãos 'brother/brothers'*), when followed by a word final consonant (cf. *cães 'dogs'*) or nasals found in word final positions (cf. *cão 'dog'*) (Vigário 2003: 75-76), motivating the underlying representation of the nouns *mão*, *leão* and *pão* as /maN+o/, /leoN+e/, and /paN+e/ (see Sousa e Silva, 2020: 29, Table 3).

the same theme class organization as Spanish and Asturian, and the examples included in Figure 11 and (30) are redistributed in the DM style in Figure 12 with a few extra nouns.[19]

Figure 12. EP Theme Classes (final pass)

III	*-e/-Ø*	actor-Ø$_{M}$ *'actor'*, actriz-Ø$_{F}$ *'actress'*, colar-Ø$_{M}$ *'necklace'*, cone-Ø$_{M}$ *'cone'*, gás-Ø$_{M}$ *'gas'*, gaz-e$_{F}$ *'gauze'*, íman-Ø$_{M}$ *'magnet'*, jovem-Ø$_{M/F}$ *'adolescent'*, juiz-Ø$_{M}$ *'judge'*, lápis-Ø$_{M}$ *'pencil'*, leão-Ø$_{M}$ *'lion'*, leit-e$_{M}$ *'milk'*, limão-Ø$_{M}$ *'lemon'*, mensagem-Ø$_{F}$ *'message'*, mort-e$_{F}$ *'death'*, pão-Ø$_{M}$ *'bread'*, papel-Ø$_{M}$ *'paper'*, paixão-Ø$_{F}$ *'passion'*, situação-Ø$_{M}$ *'situation'*; som-Ø$_{M}$ *'sound'*, val-e$_{M}$ *'valley'*, verdad-e$_{F}$ *'truth'*, viagem-Ø$_{F}$ *'trip'*, …
II	*-a*	cas-a$_{F}$ *'house'*, irm-ã$_{F}$ *'sister'*, leo-a$_{F}$ *'lioness'*, panel-a$_{F}$ *'pot'*, map-a$_{M}$ *'map'*, …
I	*-o*	mã-o$_{M}$ *'hand'*, mês-Ø$_{M}$ *'month'*, mit-o$_{M}$ *'myth'*, pat-o$_{M}$ *'duck'*, trib-o$_{F}$ *'tribe'*, …

Galician, unlike EP, is quite underrepresented when it comes to research on noun form and gender. To my knowledge there is also a lack of DM work on Galician, and previous theoretical work has been mainly morphophonological in nature and focused mainly on syllable structure (Martínez-Gil 2022). At first blush, the Galician examples in (31) exhibit similar characteristics of that of the other West Iberian languages mentioned in previous sections. Namely, no one word marker is tied to any one grammatical gender.

(31) **-e:** carne$_{\mathbf{F}}$ *'meat'*; arame$_{\mathbf{M}}$ *'wire'* Galician
-a: mesa$_{\mathbf{F}}$ *'table'*; mapa$_{\mathbf{M}}$ *'map'*
-o: tribo$_{\mathbf{F}}$ *'tribe'*; libro$_{\mathbf{M}}$
-Ø: luz$_{\mathbf{F}}$ *'light'*; papel$_{\mathbf{M}}$ *'paper'*

Based on the examples in (31), in addition to other data (cf. Álvarez & Xove, 2002: 387-391, 419-423; RAG, 2025), there is also evidence for a three-class nominal system. I therefore argue the following. The CLASS III markers are *-e* (cf. *árbore 'tree'*; *leite 'milk'*; …) and *-Ø* (cf. *actor 'actor'*; *café 'coffee'*; *grou 'crane [bird]'*; …). To tease apart the *-e* and *-Ø* we can also appeal to the phonology in that codas containing /s θ n l ɾ/ or glides /j w/ are licensed in the language. They therefore do not require the final vowel in these contexts (Martínez-Gil 2022: 910-912).[20] Moving onto the more regular cases, Galician CLASS II nouns are marked with *-a* (*mapa 'map'*; *persoa 'person'*; *rapaza 'girl'*; …) and

[19] While this is a simplification, plural morphology requires additional syntactic operations that part from the singular noun as a base form. Additionally, more work needs to be carried out to examine how we might consider plural noun forms in the greater context of word markers in the EP examples covered in Sousa e Silva (2020), as well as the potential analysis of class jumpers in Asturian (see Burner 2023).

[20] One point that should be made here is that *-e* appears obligatorily in Galician in the context of stem-final dental /-d/ (F. Martínez-Gil, personal communication, August 26, 2022).

CLASS I nouns with *-o* (*libro 'book'*; *tribo 'tribe'*; …). This organization of Galician theme classes is included in Figure 13 below.

Figure 13. Galician Theme Classes

III	*-e/-Ø*	actor-Ø$_M$ *'actor'*, actriz-Ø$_F$ *'actress'*, árbor-e$_F$ *'tree'*, artes-á$_F$ 'artist', artesán-Ø$_M$ *'artist'*, café-Ø$_M$ *'coffee'*, cu-Ø$_M$ *'butt'*, grou-Ø$_M$ *'crane [bird]'*, ladrón-Ø$_M$ *'thief'*, leit-e$_M$ *'milk'*, luz-Ø$_F$ *'light'*, man-Ø$_F$ *'hand'*, mercé-Ø$_F$ *'mercy'*, ñu-Ø$_M$ *'gnu'*, papel-ØM *'paper'*, pau-Ø$_M$ *'pole'*, rapaz-Ø$_M$ *'adolescent'*, …
II	*-a*	gat-a$_F$ *'cat'*, grú-a$_F$ *'crane [bird]'*, ladro-a$_F$ *'thief'*, map-a$_M$ *'map'*, perso-a$_F$ *'person'*, rapaz-a$_F$ *'adolescent'*, vacú-a$_F$ *'bovine'*, …
I	*-o*	gat-o$_M$ *'cat'*, libr-o$_M$ *'book'*, trib-o$_F$ *'tribe'*, …

Up to this point we have seen a clear tendency in the West Iberian word marker inventory, including with both masculine and feminine nouns. Bearing this in mind, I now formally consider a gender-bearing *n* system that also categorizes nouns in EP and Galician in §3.1.

3.1. EP and Galician n Licensers and Theme Nodes:

Figure 14 shows that there are four *n*s required to account for animate and inanimate nouns in EP. As expected, *n i* [±FEM] derives the gender difference between *filha 'daughter'* and *filho 'son'*, *n* indicates default masculine gender in nouns like *ferro 'iron'*, and *n u* [+FEM] handles the cases where the noun has fixed feminine gender, like *pera 'pear'*, among others. In Figure 15 the same *n* system also extends to the Galician animate nouns *filla 'daughter'* and *fillo 'son'*, as well as the inanimate nouns *ferro 'iron'* and *pera 'pear'*.

Figure 14. EP n Licensers

EP		
n i [+FEM]	→	filha *'daughter'*
n i [-FEM]	→	filho *'son'*
n	→	ferro *'iron'*
n u [+FEM]	→	pera *'pear'*

Figure 15. Galician n Licensers

Galician		
n i [+FEM]	→	filla *'daughter'*
n i [-FEM]	→	fillo *'son'*
n	→	ferro *'iron'*
n u [+FEM]	→	pera *'pear'*

As alluded to in Figures 12 and 13 it is apparent that EP and Galician also share the same word marker inventory that consists of *-e/-Ø*, *-a*, and *-o*. Because these word markers are tied to nominal theme classes, they are mapped onto the theme nodes in Figure 16, which are post-syntactically inserted before marker spell-out.

Figure 16. EP and Galician Word Markers

[THEME, III]	↔	*-e/-Ø*
[THEME, II]	↔	*-a*
[THEME, I]	↔	*-o*

There should also be competition between word markers in EP and Galician based on what we saw of Spanish and Asturian in §2.3. I consider these details in §3.2. in demonstration of a rule-based approach to marker spell-out in EP and Galician.

3.2. Rule-Based Insertion in EP and Galician:

Figure 17 shows that we can account for the distribution of word markers across genders in EP based on the same rule ordering that was applied to Spanish previously.

First, with CLASS III nouns an *-e* is inserted in the context of √VAL and *-Ø* in the context of √LUZ in rule (ai). Second, masculine nouns that end in *-a* like *mapa 'mapa'* have their roots specified in rule (aii) where *-a* insertion obligatorily applies. Third, the roots for feminine nouns that end in *-o* like *mão 'hand'* are specified under rule (aiii), explaining the *-o* insertion in these cases. Fourth, all feminine nouns ending in *-a*, like *casa 'house'*, are explained by rule (b), and finally, *-o* is inserted in all other cases under rule (c).

Figure 17. EP Spell-Out Rules

a.	i.	*-e/-Ø* ↔ √VAL, √TORR, √LUZ, √PAPEL, …
	ii.	*-a* ↔ √MAP, …
	iii.	*-o* ↔ √MÃ, …
b.		*-a* ↔ *n* [+FEM]
c.		*-o* ↔ elsewhere

The same schema, included in Figure 18, also gives us the Galician marker spell-out rules. The (a) rules from top to bottom account for CLASS III nouns ending in *-e/-Ø*, CLASS II masculine *-a* forms, and CLASS I feminine *-o* form.[21] Finally, rule (b) spells out *-a* for feminine *-a* form nouns, and the elsewhere rule for default masculine *-o* form nouns is stipulated in rule (c).

[21] In Galician, *man 'hand'* is feminine, but it is a CLASS III noun and not a CLASS I noun like in other West Iberian languages. For this reason, I use the feminine *-o* form noun *tribo 'tribe'* in its place to demonstrate rule (aiii).

Figure 18. Galician Spell-Out Rules

a. i. *-e/-Ø* ↔ √VAL, √TORR, √LUZ, √PAPEL, …
   ii. *-a* ↔ √MAP, …
   iii. *-o* ↔ √TRIB, …
b. *-a* ↔ *n* [+FEM]
c. *-o* ↔ elsewhere

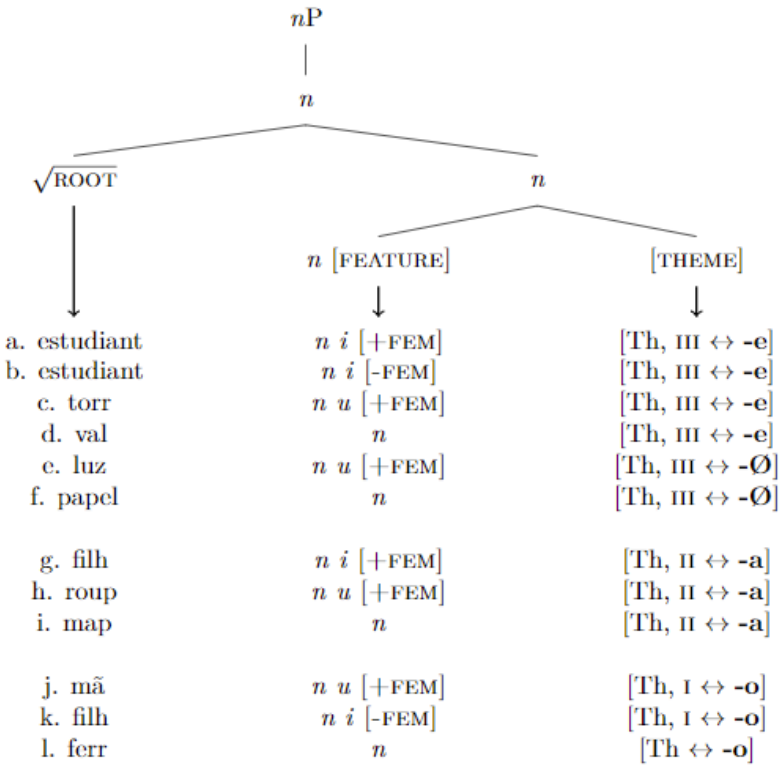
Figures 17 and 18 show how the correct word marker is phonologically spelled onto the theme node for each nominal root in EP and Galician. We are offered a much bigger picture regarding EP and Galician noun derivation through the combination of theme node and word marker behavior proposed throughout §3. In §3.3, I take the reader through the internal structure of the *n*P to account for fully derived nouns.

3.3. The Internal Structure of EP and Galician Nouns:

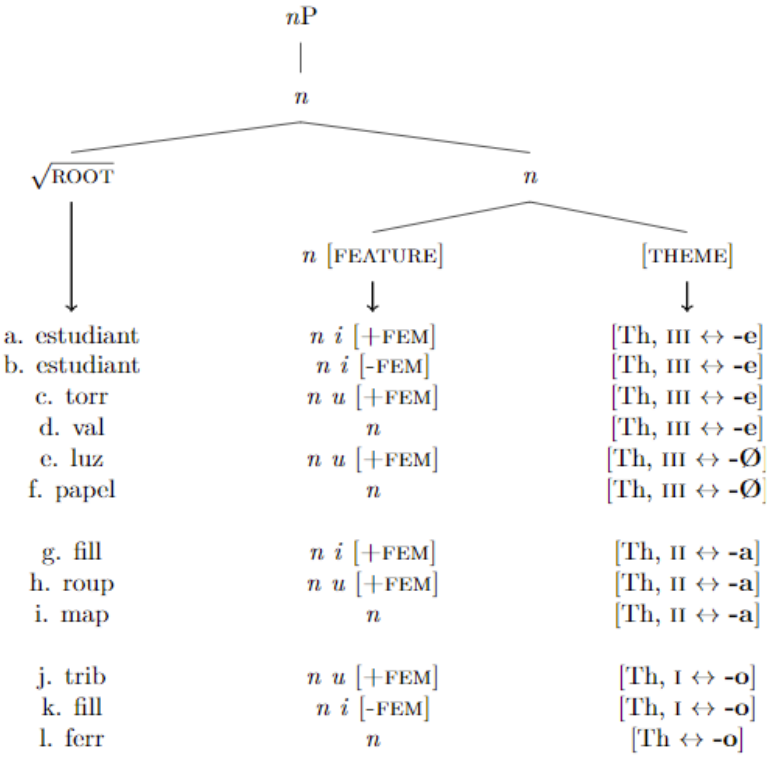
Just as I showed for Spanish and Asturian (cf. (26) and (27)), the syntactic representations in (32) and (33) for EP and Galician, respectively, show a clearer picture of the relationship between root, gender-bearing *n*, and the theme node that servers as the landing site for word marker insertion. Due to the repetitive nature of explaining the same mechanisms across the different West Iberian languages included in this paper, I only briefly summarize the EP and Galician details below in combined fashion.

In (32) and (33) *-e* or *-Ø* (a) through (f) are inserted in the context of the nominal root (cf. Figures 17 and 18, rule (ai)). The *-a* in (g) and (h) is inserted in the context of feminine gender (cf. Figures 17 and 18, rule (b)), but in (i) insertion happens through root specification (cf. Figures 17 and 18, rule (aii)). Next, (j) is derived via root specification (cf. Figures 17 and 18, rule (aiii)), and (k) and (l) are borne out in all other cases (cf. Figures 17 and 18, rule (c)).

(32) EP Noun Derivation – Underlying Structure



(32) Galician Noun Derivation – Underlying Structure



4. Conclusions and Future Considerations:

Throughout this paper I show that it is possible to treat noun form and grammatical gender uniformly in West Iberian from a DM perspective. Namely, West Iberian nouns are organized into three different theme classes each with their own word markers: CLASS III ↔ *-e/-Ø*; CLASS II ↔ *-a*; CLASS I ↔ *-o/-u*. Although they are different languages within the West Iberian continuum, through DM we can account for similarities and differences between Spanish, Asturian, EP and Galician. I arrived at these main points through the following paper organization. §2 summarized the key points of prior work that has been done on Spanish and Asturian through morphophonological (Bermúdez-Otero 2013, Harris 1992) and morphosyntactic approaches (Burner 2023, Fábregas 2024 & Kramer 2015). This summary also served as a basic demonstration of how nouns are derived to help guide the reader. In §3 previous work by Sousa e Silva (2020) and Villalva (2008) on EP and Martínez-Gil (2022) on Galician was reviewed to better contextualize noun forms and gender in these languages. Their analyses were then formalized under a DM view to propose a uniform treatment of grammatical gender and noun derivation that is on par with the system proposed for Spanish and Asturian, with future directions offered in §4.

This paper merely scratches the surface of theoretically approaching grammatical gender in West Iberian. For instance, there are other languages within the continuum that receive even less support in the vein of linguistic research. These include Mirandese, Leonese, and Cantabrese, for example. Furthermore, DM and Nanosyntax are two competing theories couched in Syntax that are both relevant in the field's aim to account for noun form and grammatical gender in general. Continual work on this topic from these theoretical frameworks will help move the field forward as we search for answers.

Give then above details, next steps regarding research on this topic include considering data in other West Iberian languages to examine how their nominal gender system might fit within a DM approach. From a comparative theoretical perspective in application to more languages, it would also be beneficial to thoroughly consider both DM and Nanosyntax. This will allow for further exploration into how these frameworks may or may not account for the data, especially regarding microvariation.

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