

Appendices to ‘Beware Occam’s Syntactic Razor: Morphotactic Analysis and Spanish Mesoclis’

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Appendix A: The Postsyntax of Clitics and Agreement in Spanish

This appendix provides a more complete account of the postsyntactic derivation of Spanish clitics and verbal agreement than the one offered in the main text, which we hope will help the reader contrast our analysis of mesoclis with others with a similar degree of explicitness. The analysis is more complete in two ways. First, the paradigms to be analyzed are larger, as they include a formal/colloquial distinction in the second person present in all dialects, as well as dialectal variation in the realization of second plural.¹ Second, the account offered below includes the vocabulary entries involved in the very last steps of the complete postsyntactic derivation of clitics and agreement prior to phonological processing.

The colloquial-formal contrast observed in second person is shown in table 1 for non-Iberian dialects.² In the singular, colloquial forms have exponence specific to second person (e.g. clitic *te*), and formal forms are syncretic with third person, and thus display the same contrasts in reflexivity, case, and gender as third person. Along the same lines, some or all of these contrasts are missing in the same contexts in which third person clitics neutralize these contrasts (e.g. in reflexives). As shown in table 2, the colloquial-formal distinction is preserved in the plural in Iberian dialects: as in the singular, colloquial exponents are specific to the second person, and formal exponents are syncretic with third person. Non-Iberian dialects lack the colloquial-formal distinction in the plural, and second plural forms are always syncretic with third person. Importantly, mesoclis applies in the context of second plural agreement *-n*, that is, in cases in which second plural is syncretic with third: in both formal and colloquial contexts in non-Iberian (where the distinction is absent in the plural), and only in formal contexts in Iberian (which preserves the distinction in the plural).

Pronominal clitics are featurally distinct from agreement morphemes in terms of category features, which we assume are D for the former and Agr for the latter. The other features relevant for the postsyntactic derivation of these morphemes are the following:

- (1) *Person features* (Halle 1997, Harbour 2016)
 - a. First person: [+participant, +author]
 - b. Second person: [+participant, -author]
 - c. Third person: [-participant, -author]
- (2) *Number feature* (Harbour 2003)
 - a. Singular: [+singular]
 - b. Plural: [-singular]

¹However, we abstract away from allomorphy in verbal agreement morphemes. See footnote 7 in the article.

²Unless otherwise indicated, references to tables, examples, footnotes, etc. are internal to these appendices. For instance, *table 1* above refers to table 1 in the current appendix, not to table 1 in the article.

Table 1: Clitics and agreement affixes in non-Iberian Spanish. (a) Nonreflexive clitics and agreement (in third person accusative, *-o-* forms are masculine, and *-a-* forms feminine). (b) Reflexive clitics.

		First	Second colloquial	Second formal	Third
Singular	Accusative	me	te	l-o, l-a	
	Dative			le	
	Agreement	-∅	-s	-∅	
Plural	Accusative	no-s	l-o-s, l-a-s		
	Dative		le-s		
	Agreement	-mos	-n		

		First	Second colloquial	Second formal	Third
Singular	Accusative	me	te	se	
	Dative				
Plural	Accusative	no-s			
	Dative				

Table 2: Clitics and agreement affixes in Iberian Spanish. (a) Nonreflexive clitics and agreement (in third person accusative, *-o-* forms are masculine, and *-a-* forms feminine). (b) Reflexive clitics.

		First	Second colloquial	Second formal	Third
Singular	Accusative	me	te	l-o, l-a	
	Dative			le	
	Agreement	-∅	-s	-∅	
Plural	Accusative	no-s	o-s	l-o-s, l-a-s	
	Dative			les	
	Agreement	-mos	-is	-n	

		First	Second colloquial	Second formal	Third
Singular	Accusative	me	te	se	
	Dative				
Plural	Accusative	no-s	o-s		
	Dative				

- (3) *Gender feature in clitics*
 - a. Feminine: [+feminine]
 - b. Masculine: [-feminine]
- (4) *Formal vs. colloquial*
 - a. Formal: [+formal]
 - b. Colloquial: [-formal]
- (5) *Case features in clitics* (Calabrese 2008)
 - a. Accusative: [-peripheral]
 - b. Dative: [+peripheral]
- (6) *Reflexivity feature in clitics*
 - a. Reflexive: [+anaphoric]
 - b. Nonreflexive: [-anaphoric]
- (7) *Clitic vs. strong pronouns*
 - a. Strong: [+strong]
 - b. Clitic: [-strong]

The following are impoverishment rules that account for the syncretisms observed in the paradigms (unless otherwise noted, all rules apply in both Iberian and non-Iberian varieties):

- (8) *Formal Impoverishment*
 - a. SD: [+participant, -author, +formal]
 - b. SC: [+participant] → [-participant]
- (9) *2Pl Impoverishment* (absent in Iberian Spanish)
 - a. SD: [+participant, -author, -singular]
 - b. SC: [+participant] → [-participant]
- (10) *Participant Impoverishment*
 - a. SD: [D, -strong, +participant, ±author, ±anaphoric, ±peripheral, ±feminine]
 - b. SC: delete [±anaphoric, ±peripheral, ±feminine]
- (11) *Dative Impoverishment*
 - a. SD: [D, -strong, -anaphoric, -participant, -author, +peripheral, ±singular, ±feminine]
 - b. SC: delete [±feminine]
- (12) *Reflexive Impoverishment*
 - a. SD: [D, -strong, +anaphoric, -participant, -author, ±peripheral, ±singular, ±feminine]
 - b. SC: delete [-participant, -author, ±peripheral, ±singular, ±feminine]
- (13) *Spurious se Impoverishment*
 - a. SD: Cl_1 specified as [D, -strong, +peripheral, -participant, -author, ±feminine, ±singular] and Cl_2 specified as [D, -strong, -peripheral, -participant, -author]
 - b. SC: delete [-participant, -author, ±feminine, ±singular] in Cl_1

2Pl Impoverishment (9) is absent in Iberian, in which only formal second plural forms are syncretic

with third person. This is due to Formal Impoverishment (8), which accounts for the fact that formal second person forms take on third person exponence in all dialects.

The last step before Vocabulary Insertion is Fission in clitics, triggered by the following constraints:

- (14) *Constraints on joint exponence of ϕ -features in clitics*
- a. * $[\pm$ participant, \pm feminine]
 - b. * $[\pm$ participant, -singular]
 - c. * $[\pm$ feminine, -singular]

These rules are ordered as follows:

- (15) *Order of postsyntactic rules (final)*
 Formal and 2PI Impoverishment >
 Participant, Dative, Reflexive, and Spurious *se* Impoverishment >
 Fission

This order ensures that second person forms that are syncretic with third person make exactly the same featural distinctions available to the third person.

Finally, the following vocabulary entries apply at Vocabulary Insertion:

- (16) *Vocabulary entries for first person clitics*
- a. [D, -strong, +participant, +author, +singular] \leftrightarrow me
 - b. [D, -strong, +participant, +author] \leftrightarrow no
- (17) *Vocabulary entries for first person agreement*
- a. [Agr, +participant, +author, -singular] \leftrightarrow mos
 - b. [Agr, +participant, +author, +singular] \leftrightarrow \emptyset
- (18) *Vocabulary entries for second person clitics*
- a. [D, -strong, +participant, -author, +singular] \leftrightarrow te
 - b. [D, -strong, +participant, -author] \leftrightarrow o (only in Iberian)
- (19) *Vocabulary entries for second person agreement*
- a. [Agr, +participant, -author, -singular] \leftrightarrow is (only in Iberian)
 - b. [Agr, +participant, -author, +singular] \leftrightarrow s
- (20) *Vocabulary entries for third person clitics*
- a. [D, -strong, -anaphoric, +peripheral, -participant, -author] \leftrightarrow le
 - b. [D, -strong, -anaphoric, -peripheral, -participant, -author] \leftrightarrow l
- (21) *Vocabulary entries for third person agreement*
- a. [Agr, -participant, -author, -singular] \leftrightarrow n
 - b. [Agr, -participant, -author, +singular] \leftrightarrow \emptyset
- (22) *Default vocabulary entry for clitics*
 [D, -strong] \leftrightarrow se

- (23) *Vocabulary entries for gender and number*
- a. [+feminine] ↔ a
 - b. [-feminine] ↔ o
 - c. [-singular] ↔ s

Appendix B: Strong Pronouns and Variable Impoverishment in Andalusian Spanish

In this appendix, we provide an analysis of Spanish second person strong pronouns. Though the exponence of these strong pronouns is ultimately tangential in accounting for the properties of mesoclitisis, they are important in arguing against a potential syntax-based alternative to our account of the syncretisms found in clitic and agreement exponents discussed in the article.

As summarized in tables 1–2 in appendix A, in formal contexts, as well as in the plural in all dialects except Iberian, second person clitics and agreement morphemes are systematically syncretic with third person, a fact accounted for in appendix A in terms of postsyntactic Formal Impoverishment and 2Pl Impoverishment. This neutralization does not extend to strong pronouns: second person *usted* (formal singular) and *ustedes* (plural, restricted to formal contexts in Iberian) are *not* syncretic with third person (cf. singular masculine *él*, feminine *ella*, and plurals *ellos*, *ellas*). We analyze *usted* and *ustedes* as being default exponents of second person strong pronouns, in competition with the colloquial-specific singular *tú/ti* (nominative and oblique, respectively) and plural *vosotros*. This explains their distribution in Iberian Spanish: *tú, ti* and *vosotros* are restricted to colloquial contexts, while *usted(es)* are used in formal contexts. In other dialects, as might be expected, no formal/colloquial distinction is made in the plural, which is always realized as *ustedes*. We analyze this fact as the result of the following impoverishment rule:³

- (24) *Strong Colloquial Impoverishment* (absent in Iberian Spanish)
- a. SD: [D, +strong, +participant, -author, -singular, -formal]
 - b. SC: delete [-formal]

Deletion of [-formal] bleeds insertion of *vosotros* in colloquial strong pronouns, which are thus realized as default *ustedes*.

Support for this view of the Spanish second person pronominal and agreement paradigm comes from the behavior of second person in certain oral varieties of Andalusian Spanish (AS), as described in Jaime Jiménez 2015.⁴ As shown in table 3, AS seems to represent a mid-point in the transition between Standard Iberian Spanish and other dialects. As in Standard Iberian Spanish, AS strong pronouns maintain a formal/colloquial contrast in the second plural. However, while *vosotros* is restricted to colloquial uses, *ustedes* can be used both as a formal and a colloquial pronoun – which brings AS closer to non-Iberian dialects, in which *vosotros* is absent and *ustedes* is used in both formal and colloquial contexts. As a result, in colloquial contexts, AS variably uses *vosotros* and *ustedes*. Interestingly, this variability also extends to agreement: as in Standard

³Compare with Formal Impoverishment (8) and 2Pl Impoverishment (9) in Appendix A, which result in syncretism with third person in clitics and agreement, while Strong Colloquial Impoverishment does not.

⁴AS is spoken in Andalusia, in Southern Spain. The features of AS discussed here are restricted to Western and Central varieties of the dialect. They are furthermore highly stigmatized, and the exponence of second person in more formal registers of AS has the properties described for Iberian Spanish here. We'd like to thank Elena Jaime Jiménez, Antonio Reyes, and Mercedes Tubino for discussion of the AS data.

Table 3: Dialectal variation in second plural strong pronouns and agreement in Spanish

		Standard Iberian	Andalusian	Non-Iberian
Colloquial	Strong pronoun	vosotros	vosotros/ustedes	ustedes
	Agreement	-is	-is/-n	-n
Formal	Strong pronoun	ustedes		
	Agreement	-n		

Iberian Spanish, second plural colloquial agreement can be realized as *-is*, but it can also be third-person-like *-n*, which is restricted to formal contexts in Standard Iberian. As a result, the strong subject pronoun *ustedes* can cooccur with either *-is* or *-n* in colloquial contexts:

(25) *Variable colloquial marking in Andalusian Spanish*

- a. Vosotros comé-is.
you.PL eat-2PL
'You eat (plural).'
- b. Ustedes come-is.
you.PL eat-2PL
'You eat (plural).'
- c. Ustedes come-n.
you.PL eat-PL
'You eat (plural).'

Following a formulation proposed by Elena Jaime Jiménez (pers. comm.), we account for the AS facts in terms of variable application of Strong Colloquial Impoverishment (in strong pronouns) and 2Pl Impoverishment (in agreement), repeated here:⁵

(26) *Strong Colloquial Impoverishment* (variable in AS, categorical in non-Iberian)

- a. SD: [D, +strong, +participant, -author, -singular, -formal]
- b. SC: delete [-formal]

(27) *2Pl Impoverishment* (variable in AS, categorical in non-Iberian)

- a. SD: [+participant, -author, -singular]
- b. SC: [+participant] → [-participant]

In Standard Iberian, neither rule applies, and only (25a) is possible in colloquial contexts. In non-Iberian, both rules apply obligatorily, giving (25c) as the only possibility. In AS, both rules apply optionally, and all the outcomes illustrated in (25) are possible.⁶

⁵On the notion of variable impoverishment in DM, see Nevins and Parrott 2010 and Oltra-Massuet 2014.

⁶Although both rules are variable in AS, there seems to be a dependency between the application of the two. According to Jaime Jiménez (2015), while *ustedes* is compatible with either *-is* or *-n* (cf. (25b) and (25c)), *vosotros* is only compatible with *-is* (cf. (25a) and **Vosotros come-n*). That is, application of 2Pl Impoverishment in an agreement morpheme entails application of Strong Colloquial Impoverishment in the subject it agrees with. A further wrinkle is added by the behavior of reflexive clitics. Like agreement, a second plural colloquial reflexive clitic can be expounded by either *os* or by third-person-like *se*. This is as expected, since 2Pl Impoverishment applies to both clitics and agreement morphemes. However, there seems to be a dependency in this case as well, since, when agreeing with the same subject,

On the postsyntactic account offered here, all referentially second person pronouns are also syntactically second person, and the various syncretisms and third-person-like behavior of these morphemes are due to the application of impoverishment. It furthermore provides a natural analysis of dialectal variation in the exponence of second plural colloquial, in terms of variation in the application of Strong Colloquial and 2PI Impoverishment: both are absent in Standard Iberian, and they apply variably in AS, and obligatorily in other dialects.

An interesting fact about the pronoun *usted(es)* is that it is synchronically derived from the written abbreviation of the archaic expression *vuestra merced* ‘your mercy’ (cf. English *Your Honor*), a *camouflage DP* in Collins and Postal’s (2012) sense: though morphosyntactically third person (as diagnosed by agreement), it contains a participant (second person) possessor pronominal that somehow determines that the entire camouflage DP is used to refer to a participant in the speech event (the hearer). It is thus tempting to analyze its etymological derivative *usted(es)* as also being a camouflage DP, as this would account for the same morphosyntax-reference mismatch it displays. A related possibility would be to claim that *usted(es)* is an *imposter*, that is, a DP such as English *the present authors*, that has the same type of mismatch, even though, unlike a camouflage DP, it doesn’t contain an overt participant pronominal.⁷

This seems like an initially plausible account of the behavior of strong second person pronouns in Spanish, and, if it is on the right track, it might be possible to analyze the third person-like behavior of their clitic and agreement counterparts as being the consequence of agreement with *usted(es)*, rather than the result of postsyntactic syncretism. As pointed out by an anonymous reviewer, a camouflage or imposter-based analysis might explain why agreement with plural colloquial *ustedes* is variable in Andalusian Spanish, as shown in (25), since related facts about pronominal agreement are an otherwise attested property of camouflage DPs (example from Collins and Postal 2012:73):

(28) To protect himself/yourself, Your Majesty should wear a bulletproof vest.

In this example, the camouflage DP *Your Majesty* can license second or third person agreement in the reflexive it antecedes. Similarly, imposters in Spanish variably trigger participant or third person verbal agreement (Dudley 2014), part of the wider phenomenon in this language known as unagreement (i.a. Jelinek 1984:48, Hurtado 1985, Suñer 1988:414–420, Höhn 2016):

(29) Los abajo firmantes {pensaban / pensábamos} en vender la casa.
 the under signers {thought.3PL / thought.1PL} in sell the house
 ‘The undersigned were thinking about selling the house.’ (Dudley 2014:49–50)

Although this might help explain the variability in agreement with colloquial *ustedes* in Andalusian, it cannot account for the absence of this variability with *ustedes* in other contexts (colloquial *ustedes* in non-Iberian and formal *ustedes* in all dialects), in which it always triggers third person

use of third-person-like *-n* entails equally third-person-like *se* (while *-is* is compatible with either form of the clitic). That is, application of 2PI Impoverishment in agreement entails application of the same rule in a clitic agreeing with the same subject. Finally, application of 2PI Impoverishment in a reflexive clitic makes application of Strong Pronoun Impoverishment in its subject antecedent obligatory, that is, *ustedes* is compatible with either *os* or *se*, but *vosotros* is only compatible with *os*. The overarching generalization can be expressed in terms of the hierarchy strong pronoun > clitic > agreement, whereby application of an impoverishment rule to an element lower in the hierarchy entails application of impoverishment to an element higher in the hierarchy. We leave this part of the analysis as a matter in need of further research.

⁷See Collins and Postal 2012. On imposters in Spanish, see Dudley 2014.

agreement. Therefore, if facts such as (25) are taken as evidence for a camouflage or imposter analysis of colloquial *usted(es)* in Andalusian, the absence of this variability in agreement in other uses of this pronoun must count as evidence against such an analysis, at least in these uses of the pronoun.

This alternative analysis faces other challenges. Although it is a plausible analysis for second person clitics and agreement morphemes in a dependency (be it agreement or antecedence) with an overt strong subject pronoun, it is not easily extendable to cases where the subject is pro-dropped:

- (30) a. Ustedes se va-n mañana.
 you.PL CL.REFL go-PL tomorrow
 ‘You’re leaving tomorrow (plural).’
 b. Se va-n mañana.
 CL.REFL go-PL tomorrow
 ‘You’re leaving tomorrow (plural).’

According to this analysis, the third-person-like form of the second person reflexive *se* and agreement *-n* in (30a) is due to agreement with the strong pronominal subject *ustedes*, a syntactically third person camouflage DP. However, the same explanation cannot be extended to *se* and *-n* in (30b), in which the subject is the covert *pro* counterpart of *ustedes*. This *pro* is not a camouflage DP, since it does not have the typical structure of these nominals, which always include an overt noun (such as *merced* in Spanish archaic *vuestra merced*).⁸ Note, furthermore, that (given the right context) (30b) can be uttered in the absence of an overt antecedent *ustedes*, and can thus not be accounted for in terms of agreement of *pro*, *se*, and *-n* with some antecedent camouflage DP in previous discourse. In a similar vein, nonreflexive second person clitics need not have any sort of overt antecedent:

- (31) Juan les dio un libro.
 Juan CL.2PL.DAT gave a book
 ‘Juan gave you a book (plural).’

An anonymous reviewer raises the question whether in cases such as (30b) and (31), with no apparent antecedent *ustedes*, there is in fact such an antecedent, albeit a covert one due to ghosting in the sense of Collins and Postal 2012. The latter authors in fact provide evidence from English that imposters and camouflage DPs cannot be ghosted, and propose a specific constraint against it (Collins and Postal 2012:100-102). Their evidence is based on the fact that only overt imposters and camouflage DPs can antecede third person pronouns. For instance, while the third person pronoun in *Because Daddy was thirsty, he drank a Coke* can take the first person imposter *Daddy* as antecedent, the subject of *He drank a Coke* cannot be interpreted as the speaker in the absence of an appropriate antecedent. Similarly, in Spanish, the goal argument of (31) cannot be interpreted as a group including the speaker, unless the discourse contains an appropriate imposter antecedent, as in the following example:

⁸The fact that the third person-like behavior of *usted(es)* has been extended to its *pro* counterpart casts serious doubt on a synchronic analysis of the former as a camouflage DP, regardless of the correct analysis of the syncretisms in clitics and agreement morphemes discussed here.

- (32) Cuando los abajo firmantes se lo pidieron, Juan les dio
 when the under signers CL.3.DAT CL.3SG.M.ACC asked Juan CL.3PL.DAT gave
 un libro.
 a book
 ‘When the undersigned asked him to, Juan gave them a book.’

This contrasts sharply with second person plural clitics and agreement in Spanish, which, as noted above, have third person-like form even in the absence of a dependency with overt *ustedes*. This speaks strongly against an imposter or camouflage-based analysis of *usted(es)*.

In summary, whatever the correct analysis of the strong pronoun *usted(es)*, the facts strongly suggest that the third person-like form of its clitic and agreement counterparts are not due to agreement with a syntactically third person imposter or camouflage DP.

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