

Beware Occam's Syntactic Razor: Morphotactic Analysis and Spanish Mesoclis

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Harris and Halle (2005) present a framework (Generalized Reduplication) that unites the treatment of phonological reduplication and metathesis with similar phenomena in morphology, thereby accounting for the apparently spurious placement of the imperative plural *-n* in mesoclitic Spanish forms such as *hága-lo-n* 'Do it!', in which clitic *lo* is sandwiched between the verbal stem and the plural suffix. Kayne (2010) has challenged their analysis, arguing that such cases should be treated purely within the syntax. We reassess some of Kayne's arguments, agreeing with his conclusion that the most important desideratum of any general analysis of such phenomena is restrictiveness. However, we contend that greater restrictiveness can be achieved through morphotactic constraints and repairs in the Generalized Reduplication formalism, triggered by a Noninitiality constraint on the positioning of the plural affix, and we develop constraints on these operations that situate interspeaker variation within the postsyntactic component.

Keywords: displacement, doubling, imperatives, mesoclis, morphotactics, Noninitiality, Spanish

1 Mesoclis in Spanish and Other Languages

Our focus in this article is mesoclis in Spanish, a pattern of displacement, and its relation with doubling of the agreement suffix before and after the clitic, in forms like those in (1)–(2), where the agreement suffix is plural *-n* and the clitic is reflexive *se*.¹

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¹ Unless otherwise noted, all numbered examples are from Spanish. Deviating from orthographic convention, we represent enclitics and mesoclitics (and occasionally, suffixes) with hyphens in Spanish examples. We also omit the standard opening exclamation mark from imperatives (¡), to avoid confusion with grammaticality/acceptability judgment marks. We follow the basic spirit of the Leipzig Glossing Rules in representing all examples, with the addition of the following abbreviations: CL (clitic), COL (colloquial), FRM (formal), and MP (middle-passive).

- (1) *Standard form: Enclisis*
 Siénte -n -se!
 sit.IMP -PL -CL.REFL
 ‘Sit down! (imperative plural)’
- (2) *Alternation between displacement and suffix doubling*
- a. Siénte -se -n!
 sit.IMP -CL.REFL -PL
- b. Siénte -n -se -n!
 sit.IMP -PL -CL.REFL -PL
 ‘Sit down! (imperative plural)’

In what follows, we use the cover term *mesoclis* for both *displacement* as in (2a) and *doubling* as in (2b). This phenomenon has been the focus of much discussion (see, in particular, Harris and Halle 2005 and Kayne 2010).

Our point of departure is the extent to which these nonstandard forms share a diachronic and synchronic relation. While many approaches might find it straightforward to treat them using separate machinery, our goal is to unify them and understand the coherence of their relation. In exactly this connection, Haspelmath (1993) discusses the “externalization of inflection”; when inflection gets trapped inside of derivation, eventually it would like to move out, as in (3).

- (3) *Externalization of inflection in compounds*
 sister-s-in-law > sister-s-in-law-s > sister-in-law-s
 (Haspelmath 1993:288)

This example involves compounding, a derivational word-formation process, and the data are most likely accessible to readers familiar with such forms in English. However, examples can be found in various other languages with derivational suffixes, as Haspelmath (1993:280) demonstrates for the case-marked form of the Georgian pronoun for ‘anything’, which involves the interaction of indefiniteness and case marking. This combination, Haspelmath shows, displays a three-way alternation between its original etymological sequence *ra-s-me*, a hybrid form *ra-s-me-s*, and its reordered form *ra-me-s*, with the dative case marker *-s* now outside of the derivational suffix *-me* (whose function is to derive an indefinite pronoun from an interrogative one).

- (4) *Externalization of inflection in Georgian indefinite formation*
 ra -s -me > ra -s -me -s > ra -me -s
 what -DAT -INDF
 ‘anything’

The tendency to reorder configurations in which inflectional suffixes (e.g., plurality marking, case marking) end up occurring inside of derivational morphemes that have been added outside of them is argued to follow from Greenberg’s (1963) Universal 28, later elaborated by Bybee (1985) and Dressler et al. (1987).

- (5) *Derivation inside Inflection*
 Derivation should be linearly between the root and inflection.

For Bybee, this morphotactic constraint has a motivation in that derivational affixes are iconically closer to the stem's meaning, while for Dressler et al., the idea is that inflectional formatives are outwardly indexical toward other sentential elements. Whatever the functional or processing motivation may be, let us take Derivation inside Inflection as a *morphotactic* constraint that holds at all synchronic stages of a grammar.

From this perspective, Haspelmath (1993) notes that historically, one might reexamine the Spanish examples above in this light, on the assumption that the clitic, originally a weak pronominal and a separate element, is outside of the plural agreement. However, once the verbal reflexive marker comes to be its own derivational marker through a kind of process of univerbation (namely, becoming a single phonological word with its stem), the plural inflection becomes trapped inside of derivation, resulting in enclisis.

- (6) Siénte -n -se!
 sit.IMP -PL -CL.REFL
 'Sit down! (imperative plural)'

Let us suppose that reflexive *se*, as a reducer of argument-structural valency, can be considered a derivational morpheme. According to the morphotactic constraint in (5), this should become the displacement form in (7), where the inflectional plural marker follows the clitic.

- (7) Siénte -se -n!
 sit.IMP -CL.REFL -PL

Indeed, such forms are synchronically attested. But Haspelmath points out that "[l]anguage change must be gradual, otherwise innovating speakers would not be understood by conservative speakers" (p. 302). Thus, as part of the transition from *siénte-n-se* to *siénte-se-n*, "speakers have no choice but to create hybrid forms" like *siénte-n-se-n* in (8), as "innovations can take only one step at a time, so hybrid forms are necessary" (p. 302).

- (8) Siénte -n -se -n!
 sit.IMP -PL -CL.REFL -PL

Note that in fact the hybrid form in (8) would allow (5) to be *existentially* satisfied, as there is at least one instance of a derivational morpheme *-se* before an accompanying inflectional morpheme *-n*.

We could thus frame (5) as "For any derivational morpheme *d* and inflectional morpheme *i*, at least one surface occurrence of *d* must be closer to the root than a surface occurrence of *i*." The intuition, therefore, is that hybrid forms allow one to have one's morphotactic cake and eat it too: there is one instance of the *-n* that *se* precedes in (8). However, Haspelmath (1993:303) leaves the following question open: "How do speakers get rid of the residual, nonfunctional internal inflection? . . . Some details of the final cleaning up remain to be accounted for." In this article, therefore, we seek an explanation that can account for the following three properties, which we view as intimately related and to be mechanistically unified:

- (9) *Explananda for the innovation of displacement and hybrid doubling forms*
 a. The morphotactic that is violated by the old forms (6)

- b. The creation of hybrid doubling forms as a response to the morphotactic (8)
- c. The one-step innovation that leads to eventual displacement (7)

As (9) makes clear, we view displacement and doubling as morphological phenomena—and specifically as postsyntactic morphological phenomena, motivated by morphotactic constraints such as (5) and others that we will develop. Not all models of this phenomenon treat it as morphological; in particular, Kayne (2010) and Manzini and Savoia (2011) present a syntactic view. We contend that once all of the generalizations and restrictions on this phenomenon are considered, however, the appeal of a purely syntactic approach is weakened.

We thus turn in greater detail to the Spanish case at hand. Importantly, the mesoclisism phenomenon in question occurs not only with the reflexive marker *se*, but also with a host of other pronominal clitics in the inventory, such as third person singular masculine accusative *lo* and singular dative *le*. A great deal of dialectological and descriptive work has looked at the existence and limits of mesoclisism in Spanish cases such as the following interpretation of the paradigm in (6)–(8), where > indicates a postulated diachronic development and, correspondingly, a degree of divergence from the standard, prescriptive variety:

- (10) *siénte-n-se* > *siénte-n-se-n* > *siénte-se-n*

Note, however, that the mesoclisism in question jumps over, or involves, only the plural *-n*, and not other stem-final instances of this segment that are, say, part of the verb root (Harris and Halle 2005:202).

- (11) a. *De -n -le eso!* > {*De-le-n/De-n-le-n*} *eso!*
 give.IMP -PL -CL.3SG.DAT that
 ‘Give that to him! (imperative plural)’
 b. *Ten -le eso!* > *{*Te-le-n/Ten-le-n*} *eso!*
 hold.IMP -CL.3SG.DAT that
 ‘Hold that for him! (imperative singular)’

Moreover, while the pronominal clitic *lo* can be affected, other phonologically identical instances are unaffected (Harris and Halle 2005:202).

- (12) a. *Hága -n -lo mejor!* > {*Hága-lo-n/Hága-n-lo-n*} *mejor!*
 do.IMP -PL -CL.3SG.M.ACC better
 ‘Do it better! (imperative plural)’
 b. *Hága -n lo mejor!* > *{*Hága lo-n/Hága-n lo-n*} *mejor!*
 do.IMP -PL the.N best
 ‘Do the best thing! (imperative plural)’

Finally, the mesoclisism in question occurs with positive imperatives (which are enclisis environments), but not with negative imperatives, which are proclitic—hence, the clitic and *-n* are never contiguous to begin with.

- (13) *No lo haga -n!* > **No {lo-n haga/lo-n haga-n}!*
 not CL.3SG.M.ACC do.IMP -PL
 ‘Don’t do it! (imperative plural)’

However, as we will discuss in section 4, the phenomenon exhibits many dialectal (and more likely, idiolectal) differences, particularly with respect to *which* clitics are involved. We should make clear here that geographic distribution, while important for fieldwork and description, particularly in knowing where one is most likely to elicit idiolects of the relevant type, is largely orthogonal from the point of view adopted here: grammar enables and limits a speaker's possibilities, and the distribution of possible and impossible is determined by grammar; it is a matter of convention whether and which of the restricted possibilities might be more frequently accepted in a given community. Following Harris and Halle (2005) and Kayne (2010), we do not report on the geographical distribution of particular grammatical features (e.g., which geolects have mesocclisis and which do not, or which geolects have which dialectal variants of constraints on mesocclisis); rather, we report on the clustering of these features within particular dialects or idiolects. Nonetheless, we underscore the importance of geographically based description as a way of potentially testing the clustering of patterns within specific mesocclisis dialects.

The empirical generalizations that are of central concern here are the following:

- (14) *Generalizations over all Spanish mesocclisis varieties*
- a. It involves pronominal clitics only.
 - b. It involves the plural agreement marker *-n* only.
 - c. It occurs only in enclisis environments.

Harris and Halle (2005) (and related work preceding theirs, such as Minkoff 1993, Halle and Marantz 1994, and Harris 1998) brought the theoretical interest of a postsyntactic approach to Spanish mesocclisis to the attention of researchers debating the existence (and nature) of a postsyntactic component. Subsequently, Manzini and Savoia (2011) documented a number of important parallels in different varieties of Romance and Albanian that are spoken in Italy, exhibiting related phenomena. This research shows that mesocclisis in the imperative is far from being a quirk of Spanish. Data from the S. Marzano dialect of Arbëresh (a group of Albanian varieties spoken in southern Italy), where plural agreement has a very different phonotactic form (namely, *-ni-*), exhibit the same alternation between regular enclisis (15) and mesocclisis (16).

- (15) 'hua -nni j a
 say -2PL CL.3SG.DAT CL.3SG.ACC
 'Say it to him!'
 (S. Marzano Arbëresh; Manzini and Savoia 2011:1104)

- (16) 'hua -mmə -ni ε
 say -CL.1SG.DAT -2PL CL.3SG.ACC
 'Say it to me!'
 (S. Marzano Arbëresh; Manzini and Savoia 2011:1104)

The restrictions that generate dialectal and idiolectal variation among Spanish speakers are at the heart of section 6, where the *person features* of the pronominal clitic may determine whether it is eligible for mesocclisis or not. Similarly, as the contrast in (15)–(16) shows, person features can determine whether mesocclisis applies in Italian dialects. While we focus mainly on Spanish, we return periodically to the Albanian and Italian dialects discussed by Manzini and Savoia (2011)

where they help to constrain the analytic space of options in explaining restrictions on mesocclisis more generally.²

The structure of this article is as follows. Section 2 introduces the Generalized Reduplication formalism, which has the property of unifying doubling and displacement as alternative repairs to the same morphotactic. Section 3 provides background on the Spanish clitic and agreement system, which is relevant for understanding constraints on where mesocclisis occurs, and section 4 includes three explananda that govern mesocclisis: the person and case hierarchies, the plural number constraint, and the two-clitic hierarchy. Section 5 discusses Kayne's (2010) syntactic analysis of mesocclisis (and how it fares with respect to these three explananda). Section 6 presents a revised morphotactic analysis based on Harris and Halle's (2005) original proposal, with new constraints to address the explananda of section 4, and it integrates our account of mesocclisis within a more general analysis of the postsyntactic formation of clitic clusters in Spanish, which we argue is a cyclic process. Sections 7–8 conclude and outline avenues for future research.

2 The Harris-Halle Formalism and Its Properties

Harris and Halle's (2005) formalism, which we called *Generalized Reduplication* (GR) in Arregi and Nevins 2012, was developed to account for kinds of partial reduplication found in phonology and morphology. Some of the specific initial motivation came from exceptions to Marantz's (1982) generalization that suffixing partial reduplication copies from the right edge, while prefixing partial reduplication copies from the left edge. The known counterexamples include the following:

- (17) a. *Absolutive singular reduplication in Chukchee*
 nute-nut 'earth, absolutive singular'
 (Marantz 1982:439)
- b. *Plural reduplication in Madurese*
 wáq-búwáq-án 'fruits'
 (Marantz 1982:451)

In the Chukchee case, reduplication is to the right, but skips a segment (*e*) at the right edge. In Madurese, reduplication is to the left, but skips segments (*bú*) at the left edge. In the GR formalism, these are treated in terms of special brackets that are interpreted in specific ways by the phonology.³

- (18) *Partial reduplication in the GR formalism*
- a. Repeat all material inside [. . .]:
 [A B] → ABAB
- b. Delete the material after > in the second copy:
 [A > B] → ABAB → ABA

² We remain agnostic, however, on whether the mesocclisis found in the future and conditional tenses of European Portuguese (e.g., *dar-lhe-ei* (give-CL.3SG.DAT-FUT.1SG) 'I will give to him') or the so-called allocutive cases found in Romanian imperatives discussed by Hill (2015) are to be united with those under discussion here.

³ We reverse the direction of the angled brackets from the way they are defined in Harris and Halle 2005 for reasons described in the text.

c. Delete the material before < in the first copy:

$$[A < B] \rightarrow ABAB \rightarrow BAB$$

The notation in (18a) describes the standard cases falling under Marantz's generalization, with no skipping. In Chukchee (17a), the representation [*nut* > *e*] for absolutive singular derives reduplication to the right, but skipping the rightmost segment: *nute-nute* → *nute-nut*. In Madurese (17b), plural [*bú* < *wáq*]-*án* derives reduplication to the left, but skipping the leftmost segmental material: *búwáq-búwáq-án* → *wáq-búwáq-án*. Note that these angled brackets can be thought of as arrows, in the sense that their effect is also to indicate that [*A* > *B*] will teleologically "move" *A* to a rightward position, while [*A* < *B*] will teleologically "move" *B* to a leftward position (e.g., *nut* moves to the right in Chukchee, and *wáq* moves to the left in Madurese). This is the intuition behind having these arrows point in these directions, in fact.

One of the interesting properties of this specific formalism is what happens when the two kinds of arrows are combined. The effect of deleting *A* in the first copy and *B* in the second is wholesale metathesis.

(19) *Metathesis in the GR formalism*

$$[A > < B] \rightarrow ABAB \rightarrow BA$$

Therefore, this formalism very closely links partial reduplication (henceforth, doubling) and metathesis. These processes in fact differ in only one angled bracket, as represented in the following statement of the Spanish mesoclis rule, which we will call the *GR rule*, adapted from Harris and Halle 2005:⁴

(20) *Generalized Reduplication in Spanish imperatives (to be revised in section 6)*

a. SD: *X Agr Cl Y*, where Agr is [–participant, –singular].⁵

b. SC: Insert

- [to the immediate left of Agr
-] to the immediate right of Cl
- > < to the immediate right of Agr (Displacement)

or

> to the immediate right of Agr (Doubling)

(21) *Derivation of mesoclis in (7)–(8)*

a. *siénte* [*n* > < *se*] = *siénte se n*

b. *siénte* [*n* > *se*] = *siénte n se n*

Morphological metathesis and doubling rules, with a clearly postsyntactic nature, have been amply documented in the literature (see, e.g., Arregi and Nevins 2012: chap. 5, Myler 2013, Calabrese

⁴ Throughout this article, we state all postsyntactic rules of impoverishment and mesoclis in terms of a structural description (SD) and a structural change (SC), following Arregi and Nevins 2012.

⁵ Although the plural agreement morpheme agrees with a (pro-dropped) semantically second person subject, the agreement morpheme itself is postsyntactically third person. See section 3, where we spell out in some detail our assumptions about the features of clitics and agreement morphemes in Spanish, as well as their postsyntactic derivation.

and Pescarini 2014, Smith 2014). Interestingly, although metathesis and reduplication are virtually never linked in phonology, numerous phenomena of this type are found in morphosyntax (e.g., the many cases of hybrid forms documented in Haspelmath 1993). While the GR formalism is closely related in spirit to Embick and Noyer's (2001) operation of Local Dislocation, it has the advantage of tying together displacement/metathesis with doubling. Importantly, the GR formalism as shown above applies after Vocabulary Insertion, or, at the very least, one cannot tell if it is applying before. However, in Arregi and Nevins 2012:chap. 5 we document the existence of ergative metathesis alongside ergative doubling in Basque, and importantly, in the case of the latter the two sites can be occupied by different allomorphs, thereby demonstrating that metathesis applies *before* Vocabulary Insertion in this case.

While Harris and Halle (2005) do not comment on the morphotactic motivations for the mesoclitis phenomenon in (21), it is clear that they unknowingly have provided an implementation for exactly Haspelmath's diachronic scenario and his desiderata for showing how the intermediate copy is eventually deleted. The GR formalism predicts that whenever morpheme displacement is found, doubling should also be found close by in time (i.e., diachronically) or space (dialectally). This seems confirmed in cases such as Lithuanian *si* mesoclitis, which shows doubling in addition (Nevis and Joseph 1992); movement of the English comparative morphemes *-er/-est* (which show doubling as in *more better*, *most unkindest cut*); and potentially a number of others as well. However, the extension of the phenomenon in (21) to Spanish clitics that seem to have no derivational character, yet cause inflection to move "outside" of them, suggests a closer look at the details and restrictions on this phenomenon, to which we turn in section 4. First, however, a close description of Spanish clitic and agreement morphology is in order.

3 Exponence and Syncretism in Spanish Clitics and Agreement

Crucial in understanding Spanish imperative mesoclitis are a number of facts concerning the exponence of pronominal clitics and agreement in Spanish. Both plural agreement *-n* and several instances of the clitic *se* involved in mesoclitis are second person morphemes that are syncretic with third person. Also relevant is the fact that certain clitics are polymorphemic, but others are monomorphemic. An explicit account of these facts and others is, we believe, an important step toward understanding the nature of the restrictions on mesoclitis discussed in the next section. This section provides an analysis of the postsyntactic exponence of clitic and agreement morphemes in non-Iberian Spanish,⁶ focusing on the details relevant to mesoclitis. A more thorough analysis of a wider range of dialects, including an account of the paradigm of second person strong pronouns, is to be found in online appendices A and B (http://www.mitpressjournals.org/doi/suppl/10.1162/ling_a_00286).

The analysis offered here is postsyntactic. It is, however, conceivable that syntactic accounts of the second-third person syncretism and the polymorphemic character of some clitics described

⁶ We concentrate on non-Iberian Spanish for simplicity, as this allows us to abstract away from certain contrasts that are available only in Iberian dialects and that are not directly relevant to our account of mesoclitis.

here would be compatible with our postsyntactic account of mesocclisis in later sections. The main purpose of this section is thus not to claim that a postsyntactic analysis of these facts of exponence is superior to a syntactic one; rather, it is to give an explicit account that can provide a solid basis for our postsyntactic analysis of mesocclisis (though see appendix B for discussion of a potential syntactic account of the second-third person syncretism).

The paradigms of (non-Iberian) Spanish pronominal clitics and agreement, shown in table 1,⁷ display a number of syncretisms affecting distinctions across all relevant features of person, number, gender, case, and reflexivity. Furthermore, while some clitics are polymorphemic (e.g., accusative third person singular feminine *l-a*, third person plural dative *le-s*), others are not (third person singular dative *le*). Within the framework of Distributed Morphology adopted here (Halle and Marantz 1993), we assume that both clitics and agreement are syntactically specified for these features, and that the different syncretisms are due to the standard operation of underspecification in vocabulary entries (and the Elsewhere Principle) and to impoverishment rules. The focus

Table 1

Pronominal clitics and finite agreement affixes in Spanish (non-Iberian dialects). (a) Nonreflexive clitics and agreement (in third person accusative, *-o-* forms are masculine, and *-a-* forms feminine). (b) Reflexive clitics.

a.		First	Second	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	

b.		First	Second	Third
Singular	Accusative	me	te	se
	Dative			
Plural	Accusative	no-s		
	Dative			

⁷ Table 1a only shows agreement affixes in tenses other than the present indicative and the perfective past (aorist), which have certain tense/aspect/mood-specific allomorphs (e.g., *-o* for first person singular in the present indicative, *-ste* for second person singular in the perfective). These paradigms also have the agreement syncretisms discussed in the text. In this section, we also gloss over the colloquial/formal distinction, whose relevance is only orthogonal to mesocclisis, and we focus on non-Iberian dialects. For more complete paradigms, see appendix A.

of this section is syncretism due to the latter, and we provide a more complete account, including vocabulary entries, in appendix A. We furthermore assume that all clitics are syntactic atoms of category D, though some surface as polymorphemic, due to the effect of postsyntactic fission, discussed at the end of this section.⁸

The syncretisms most directly relevant to mesocclisis are these:

(22) *Syncretisms in Spanish agreement and pronominal clitics*

- a. First and second person clitics are syncretic for reflexivity, case, and gender.
- b. All second person plural forms are identical with third person plural.⁹
- c. Third person dative clitics (unlike accusatives) are syncretic for gender.
- d. The third person reflexive clitic is syncretic for case, gender, and number.

Certain parts of the paradigm covered by more than one of these generalizations make the interaction between these neutralizations nontrivial. In particular, second person plural clitics should be subject to (22a), but because of (22b), they do in fact manifest distinctions in reflexivity, case, and gender (table 1). Furthermore, (22b) and (22d) together cause second person plural reflexives to be realized by a number-neutral exponent, unlike other first and second person clitics (table 1b). This section provides an account of these neutralizations and interactions.

The postsyntactic operations responsible for these neutralizations are impoverishment rules that act on clitic and agreement formatives containing the following ϕ -features:

(23) *Person features* (Halle 1997, Harbour 2016)

- a. First person: [+participant, +author]
- b. Second person: [+participant, –author]
- c. Third person: [–participant, –author]

(24) *Number feature* (Harbour 2003)

- a. Singular: [+singular]
- b. Plural: [–singular]

(25) *Gender feature in clitics*

- a. Feminine: [+feminine]
- b. Masculine: [–feminine]

Within clitics, datives are [+peripheral], and accusatives are [–peripheral] (features due to Calabrese 2008), and reflexivity is encoded by the feature [\pm anaphoric]. Clitics and agreement morphemes are distinguished by their category features, D and Agr, respectively. In addition, clitics are specified as [–strong], which distinguishes them from their strong pronominal counterparts,

⁸ For other Distributed Morphology accounts of the postsyntax of Spanish pronominal clitics, see Bonet 1991, 1995, Halle and Marantz 1994, and Harris 1995.

⁹ In addition, second person formal forms are syncretic with third person in both numbers. See appendix A.

which are [+strong]. The feature [−strong] is thus responsible for defining the class of D elements that undergo syntactic cliticization, as well as any postsyntactic operations particular to pronominal clitics. In the remainder of this article, we will use the subscript *Cl* for elements specified as [−strong], so that pronominal clitics are D_{Cl} .

The metasyncretism observed in (22a) for first and second person clitics is due to the following impoverishment rule:¹⁰

(26) *Participant Impoverishment*

- a. SD: [D, −strong, +participant, ±author, ±anaphoric, ±peripheral, ±feminine]
- b. SC: Delete [±anaphoric, ±peripheral, ±feminine]

Second person plural clitics and agreement are syncretic with the third person (22b) due to the effect of a different impoverishment rule.¹¹

(27) *2Pl Impoverishment*

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

By changing the value of the feature [±participant] from positive to negative, second person plural is exponed in the same way as third person plural. As shown in table 1, these impoverished second person morphemes behave like third person not only in the sense that they have the same form as third person, but also in that they express featural distinctions in gender, case, and reflexivity available only to the third person. This entails that 2Pl Impoverishment precedes Participant Impoverishment, as the former rule bleeds neutralization of reflexivity, case, and gender features in the participant morphemes it applies to.

(28) *Order of postsyntactic rules (to be revised)*

2Pl Impoverishment > Participant Impoverishment

The exponence of second person plural morphemes is discussed below, together with the third person forms they are syncretic with.¹² These syncretisms figure prominently in our description and analysis of mesoclitis in Spanish second person plural imperatives in sections 4 and 6; in particular, second person plural clitics and agreement (i.e., *-n*) are treated as nonparticipant (third person) by mesoclitis, a consequence of the independently motivated rule of 2Pl Impoverishment.

¹⁰ On the general notion of metasyncretism, see Williams 1994, Bobaljik 2002, and Harley 2008. The latter two argue for impoverishment-based accounts of metasyncretism.

¹¹ In appendix B, we argue against a potential syntax-based alternative analysis to our postsyntactic account of this syncretism.

¹² Second person singular morphemes, which are not affected by 2Pl Impoverishment, are realized by exponents specific to second person (*te*, *-s*), as shown in table 1. See appendix A.

Also relevant to mesoclitisis is the fact that, although third person clitic forms make distinctions in reflexivity, case, number, and gender, they do undergo some neutralizations, described in (22c) and (22d) and accounted for by two separate impoverishment rules.

(29) *Dative Impoverishment*

- a. SD: [D, -strong, -anaphoric, -participant, -author, +peripheral, ±singular, ±feminine]
 b. SC: Delete [±feminine]

(30) *Reflexive Impoverishment*

- a. SD: [D, -strong, +anaphoric, -participant, -author, ±peripheral, ±singular, ±feminine]
 b. SC: Delete [-participant, -author, ±peripheral, ±singular, ±feminine]

Dative Impoverishment accounts for the fact that gender contrasts available in accusative clitics are absent in dative clitics (see table 1a). In reflexive clitics, feature neutralization is more extensive, as (30) deletes person, case, number, and gender (cf. tables 1a and 1b). As a result of this rule, third person reflexives are realized by the default clitic exponent *se* (e.g., Bonet 1991, 1995, Halle and Marantz 1994, Harris 1995, Nevins 2007), as shown in more detail in appendix A.

A different type of neutralization can be observed in clitic clusters. In the context of a third person accusative clitic, third person dative clitics are realized as *se*, a phenomenon known as *spurious se* (Perlmutter 1971). As illustrated in (31), when nonreflexive third person dative clitics (singular *le*, plural *les*) are not clustered with another clitic, their form is distinct from that of their reflexive counterpart *se*.

(31) *Third person dative clitics*

- a. María se dio un libro.
 María CL.REFL gave a book
 ‘María gave a book to herself.’ (Ungrammatical in the nonreflexive reading)
 b. María {le / les} dio un libro.
 María {CL.3SG.DAT / CL.3PL.DAT} gave a book
 ‘María gave a book to him/her/them.’ (Ungrammatical in the reflexive reading)

When they are clustered with an accusative clitic, the distinction is neutralized in favor of the reflexive.

(32) *Spurious se*

- a. *María {le / les} lo dio.
 María {CL.3SG.DAT / CL.3PL.DAT} CL.3SG.M.ACC gave
 ‘María gave it to him/her/them.’
 b. María se lo dio.
 María CL.3.{REFL/DAT} CL.3SG.M.ACC gave
 ‘María gave it to herself/him/her/them.’

This is due to the following impoverishment rule, inspired by Bonet 1991, 1995, Halle and Marantz 1994, and Nevins 2007:

(33) *Spurious se Impoverishment*

- a. SD: Cl₁ specified as [D, -strong, +peripheral, -participant, -author, ±singular] and Cl₂ specified as [D, -strong, -peripheral, -participant, -author]
- b. SC: Delete [-participant, -author, ±singular] in Cl₁

Similar to the impoverishment of third person reflexives (whether in clusters or not), this impoverishment results in all dative clitics being realized with the default exponent *se* when clustered with accusative clitics.

Due to the overall neutralization between second and third person in the plural, second person plural clitics are also subject to these neutralizations that are otherwise particular to the third person. This entails that 2PI Impoverishment is in a feeding relation with Dative, Reflexive, and Spurious *se* Impoverishment:

(34) *Order of postsyntactic rules (to be revised)*

2PI Impoverishment > Participant, Dative, Reflexive, and Spurious *se* Impoverishment

The absence of gender in dative clitics, as well as of person and number in reflexives and spurious datives, due to the joint action of these impoverishment rules, is an important ingredient of our account of constraints on mesoclefts and variation thereof, as described in the following section.

Finally, as is evident in table 1, all plural clitics contrast with their singular counterparts and with number-neutral clitics (e.g., reflexive *se*), in that they are polymorphemic; that is, their [-singular] feature is realized by means of a separate plural exponent *-s*. Similarly, accusative third person and second person plural clitics not otherwise affected by Reflexive Impoverishment are the only ones that maintain gender features after impoverishment, and these gender features are expressed by separate gender-specific exponents (masculine *-o* and feminine *-a*). We propose that this agglutinative effect is due to fission, triggered by the following feature cooccurrence restrictions:¹³

(35) *Constraints on joint exponence of ϕ -features*

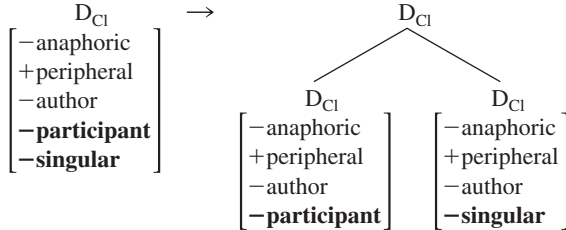
- a. *[±participant, ±feminine] (no joint exponence of person and gender)
- b. *[±participant, -singular] (no joint exponence of person and plural)
- c. *[±feminine, -singular] (no joint exponence of gender and plural)

These constraints ensure mutual separate exponence of person, gender, and plural number, by triggering fission of morphemes in which they cooccur into separate nodes. For instance, like

¹³ Although we state fission as it applies specifically to pronominal clitics, it should be noted that agglutinative exponence of gender and number is a more general property of Spanish inflection, present in all other parts of speech that jointly inflect for these features (nouns, adjectives, determiners, etc.). The particular claim made here that person ([±participant]) features are in part responsible for fission in clitics cannot be extended to other parts of speech such as nouns and adjectives, which do not inflect for person. In addition, although this is not directly observable in pronominal clitics, inflectional class is a relevant category in describing Spanish inflection. We leave a more comprehensive account of the exponence of Spanish inflection for future work. See Harris 1991, 1999.

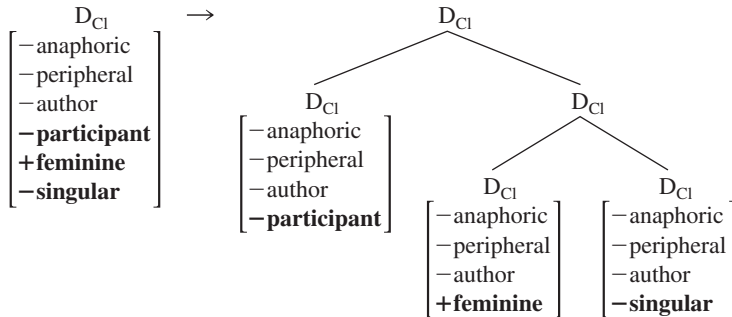
other plural clitics lacking gender, nonreflexive dative plural *le-s* undergoes fission splitting [–participant] and [–singular], triggered by constraint (35b) (the clitic lacks gender, due to Dative Impoverishment).

(36) *Plural fission in dative plural clitics*



In contrast, singular *le* remains monomorphemic, since it is not [–singular] (and also lacks gender). In addition, nonreflexive accusative clitics retain gender features, and their plural counterparts thus violate all constraints in (35), triggering fission into three separate nodes, as illustrated in (37) in the feminine.¹⁴

(37) *Gender and plural fission in feminine plural accusative clitics*



As is evident in the examples above, we follow Arregi and Nevins 2012:132–136 in assuming that copies of all features not affected by the triggering constraint are present in each of the morphemes in the outputs of fission. In particular, the categorial D feature present in the input, as well as others (e.g., [–strong], represented with the subscript Cl above), is present in all the morphemes that result from fission.

¹⁴ Arguably, clitics in other Romance languages are subject to only a subset of the constraints in (35) and thus display a higher degree of fusional inflectional morphology. For instance, Italian is not subject to constraint (35c) banning the joint exponence of gender and plural number, as illustrated by the accusative clitic paradigm *l-o* (masculine singular), *l-a* (feminine singular), *l-i* (masculine plural), *l-e* (feminine plural).

Fission applies after impoverishment.¹⁵

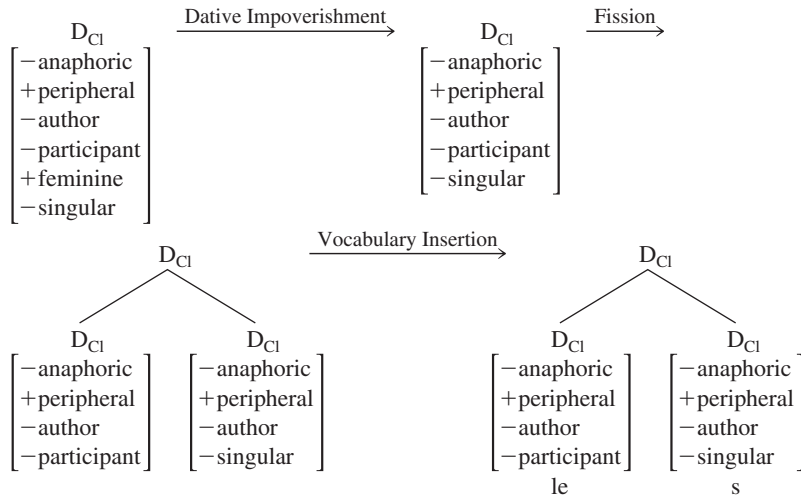
(38) *Order of postsyntactic rules* (to be revised in appendix A)

2Pl Impoverishment >

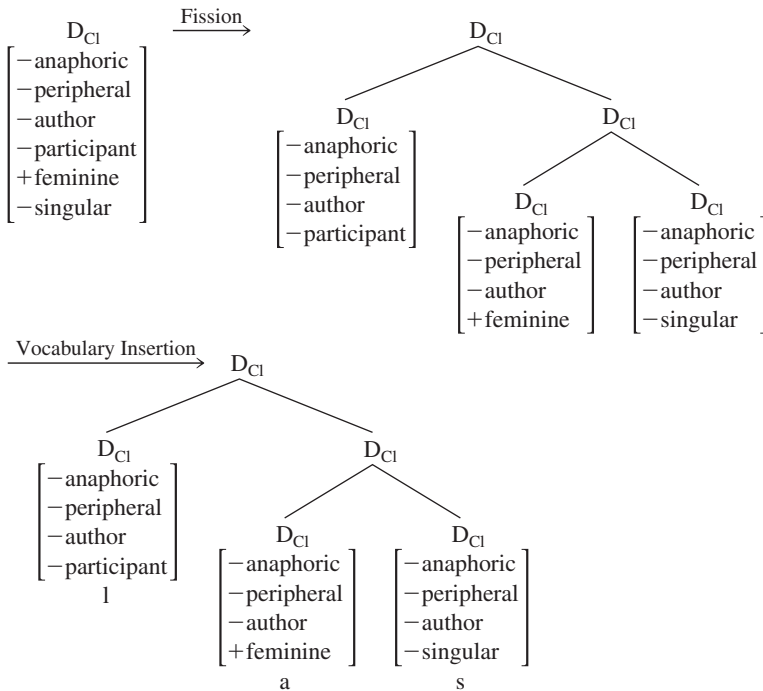
Participant, Dative, Reflexive, and Spurious *se* Impoverishment > Fission

This ordering accounts for the fact that the number of exponents in a clitic correlates with the number of featural distinctions it makes. This is illustrated in the following examples (for details of Vocabulary Insertion, see appendix A):

(39) *The postsyntactic derivation of a feminine third person plural dative clitic*



¹⁵ We leave open here the more general possibility that some of this ordering is derived from intrinsic properties of the rules themselves (as we proposed in Arregi and Nevins 2012:chap. 4, where paradigmatic impoverishment rules such as 2Pl Impoverishment precede all syntagmatic impoverishment rules such as Spurious *se* Impoverishment).

(40) *The postsyntactic derivation of a feminine third person plural accusative clitic*

Crucially for our discussion below, clitics differ in the amount of internal structure they have, since fission applies to them differently depending on their feature content. Thus, it partitions the set of clitics in two different ways. First, all postsyntactically plural clitics are polymorphemic, while others are not necessarily so (e.g., dative plural *le-s* vs. dative singular *le* and number-neutral reflexive *se*). Second, third person (nonreflexive) accusatives are the only clitics whose gender features are not deleted by impoverishment, so they are always polymorphemic (*l-o(-s)*, *l-a(-s)*), contrasting with all others (e.g., dative *le(-s)*). Mesoclis is variably sensitive to this internal structure, which accounts for some of the variation in the constraints on the phenomenon discussed in the next section.

In addition to the clitics' internal structure, the postsyntactic account above derives featural properties of certain morphemes that are relevant for mesoclis triggered by plural agreement *-n* in imperatives. As part of the more general neutralization between second and third person plural, second person plural agreement *-n* is *third* person plural at the point of the derivation at which it is displaced/doubled. In addition, reflexive and spurious *se*, regardless of their semantically motivated feature content (i.e., second or third person, singular or plural), have no person or number features postsyntactically. These syncretisms, and the impoverishment rules that account for them, are crucial in understanding some of the constraints on mesoclis, to which we now turn.

4 Three Crucial Explananda in Spanish Mesocclisis

The literature describes several restrictions on mesocclisis in Spanish. Here, we concentrate on three such restrictions, which we analyze in later sections. We begin with constraints involved in some of the variation displayed by mesocclisis: while some dialects allow it only with nonthird person clitics, others also allow it with third person; in addition, some make a further cut among third persons, between dative and accusative. The second restriction, which applies to all dialects, bans mesocclisis of plural clitics. Finally, we discuss a restriction on mesocclisis in clusters with more than one clitic.

4.1 The Person and Case Hierarchies

As discussed in the dialectal literature reviewed by Harris and Halle (2005), in particular Rosenblat 1946:229–232 and Kany 1951:112–114, not all clitics pattern equally in terms of their ability to undergo mesocclisis. In what follows, we concentrate more on the morphosyntactic generalizations themselves than on the specific geographic distributions, noting however that in general, Iberian Spanish is more restrictive than Latin American varieties. The generalizations are as follows. While some speakers allow mesocclisis for all clitics, including third person singular *lo*, *la* (accusative masculine and feminine, respectively), and *le* (dative, syncretic for gender), the more restrictive speakers allow it only for the first person singular *me* and for (reflexive or spurious) *se*. This variation is illustrated in the following paradigm, where “%” indicates that the mesoclitic form is not allowed by the more restrictive speakers:

- (41) a. Siénte -(n) -se -n!
 sit.IMP -PL -CL.REFL -PL
 ‘Sit down! (imperative plural)’
- b. Vénda -(n) -se -n -lo!
 sell.IMP -PL -CL.DAT -PL -CL.3SG.M.ACC
 ‘Sell it to them! (imperative plural)’
- c. Vénda -(n) -me -n eso!
 sell.IMP -PL -CL.1SG.DAT -PL that
 ‘Sell me that! (imperative plural)’
- d. %Vénda -(n) {-lo / -la} -n!
 sell.IMP -PL {-CL.3SG.M.ACC / -CL.3SG.F.ACC} -PL
 ‘Sell it! (imperative plural)’
- e. %Vénda -(n) -le -n eso!
 sell.IMP -PL -CL.3SG.DAT -PL that
 ‘Sell him/her that! (imperative plural)’

This dialectal split can be described naturally in terms of a person hierarchy: *l-* clitics are third person, but first person singular *me* is not, and neither is *se*: in any of its uses, a clitic that will surface as *se* is subject to either Reflexive or Spurious *se* Impoverishment, which deletes its

person features (among others). Thus, nonthird person clitics outrank third person clitics in the hierarchy of accessibility to mesoclisism.

- (42) *Mesoclitic person hierarchy: Nonthird person over third person*
se, me > lo, la, le

Any speaker who allows mesoclisism with the lower part of the hierarchy also allows it with the higher part. The phenomenon to be understood is how to capture the restriction that, for some speakers, third person clitics cannot undergo mesoclisism. Clearly, nothing in the GR formalism as it stands would block this, which was one of Kayne's (2010) criticisms of Harris and Halle 2005. We agree that any adequate account of the phenomenon must cover this, and in section 6.5 we demonstrate how such restrictions can be built into the formulation of mesoclisism within the GR formalism.

In addition to the basic cut in terms of nonthird person vs. third person, there is a hierarchy within the third person clitics, related to case. It seems that some speakers allow mesoclisism only with reflexive *se*, and, among third person clitics, some speakers can mesoclitize dative *le*, but not accusative *lo, la*. The datives, of course, do not show gender distinctions and, as shown in section 3, this means that they are structurally less complex. (Regarding our implementation in structural terms, see section 6.5.) For such speakers, a more articulated hierarchy would be characterized as follows:

- (43) *Mesoclitic case hierarchy: Dative third person over accusative third person*
le > lo, la

While this hierarchy does not cut across persons, it does cut *within* persons, specifically between dative and accusative, as the latter clitics show additional complexity in bearing a gender distinction.

Two further observations on these hierarchies are in order before we turn to other restrictions on mesoclisism. First, the person hierarchy does not include second person singular *te*. The reason is simple: the imperative forms with mesoclisism have a second person plural subject, but second person singular clitics are universally banned from cooccurring with second person plural subjects (a ban we assume is due to Condition B of binding theory). This restriction applies independently of mesoclisism and is found in both both enclitic and proclitic environments.

- (44) a. *Vénda -n -te eso!
 sell.IMP -PL -CL.2SG.DAT that
 'Sell yourself that! (imperative plural)'
 b. *Te vendieron eso.
 CL.2SG.DAT sell.PST.2PL that
 'You (plural) sold yourself that.'

Also absent from the person hierarchy is Iberian Spanish second person plural colloquial *os*, described in appendix A. Two properties of Spanish grammar conspire to make it impossible to test the mesoclitic properties of *os*. First, it cannot be combined with plural imperative *-n*.

- (45) *Vénda -n -os eso!
 sell.IMP -PL -CL.2PL.DAT that
 'Sell us that! (imperative plural)'

Since in Iberian Spanish *-n* in its second person plural use is restricted to formal environments, it clashes with the use of colloquial *os* (quite generally, the addressee must be referred to consistently with formal or colloquial forms, at least within a sentence). Second, the Iberian second person plural colloquial counterpart of *-n* in imperatives, *-d*, does not participate in mesoclisism, regardless of what clitic is present.

- (46) a. Vende -d -me eso!
 sell.IMP -2PL.COL -CL.1SG.DAT that
 'Sell me that! (imperative colloquial plural; Iberian Spanish)'
 b. *Vende -(d) -me -d eso!
 sell.IMP -2PL.COL -CL.1SG.DAT -2PL.COL that
 'Sell me that! (imperative colloquial plural; Iberian Spanish)'

Therefore, *os* is banned from mesoclisism environments for reasons that are independent from the clitic hierarchy.

4.2 The Ban on Plural Mesoclitics

The next restriction, universal across mesoclitic varieties, is that plural clitics (first person plural *nos*, third person dative *les*, and third person accusative *los*, *las*) uniformly do not undergo mesoclisism.¹⁶

- (47) a. Sírva -n -nos eso!
 serve.IMP -PL -CL.1PL.DAT that
 'Serve us that! (imperative plural)'
 b. *Sírva -(n) -nos -n eso!
 serve.IMP -PL -CL.1PL.DAT -PL that
- (48) a. Sírva -n -les eso!
 serve.IMP -PL -CL.3PL.DAT that
 'Serve them that! (imperative plural)'
 b. *Sírva -(n) -les -n eso!
 serve.IMP -PL -CL.3PL.DAT -PL that
- (49) a. Sírva -n -los!
 serve.IMP -PL -CL.3PL.M.ACC
 'Serve 'em! (imperative plural)'

¹⁶ On Iberian second person plural *os*, see section 4.1.

- b. *Sírva -(n) -los -n!
 serve.IMP -PL -CL.3PL.M.ACC -PL

Harris and Halle (2005) claim that the ban on plural mesoclisism is phonotactic in nature, since the resulting consonant cluster *sn#* is banned by Spanish phonology. We do not think this is a valid explanation of the facts.

First, existing phonotactic repairs do not step in to fix the banned mesoclitic examples. Spanish does not allow homosyllabic consonant clusters starting with *s*, and such underlying clusters are typically repaired by epenthesis, as in *stop* [estop] ‘stop sign’ and *escribir* ‘write’, from underlying [skribir] (cf. *in-scribir* ‘engrave’, syllabified as [ins.kri.βir]). However, **sírva(n)losen*, **sírva(n)losne* are just as ungrammatical as **sírva(n)losn* as mesoclitic variants of *sírvanlos*. Deletion and metathesis would result in *n#*, *s#*, or *ns#*, all of which are allowed by Spanish phonotactics (*ns#* is possible at least in the plural of some borrowed words, such as *yens*), but neither helps in repairing **sírva(n)losn*: **sírva(n)lon*, **sírvalos*, and **sírva(n)lons* are not possible as mesoclitic variants of *sírvanlos* (the latter is of course grammatical, but it is simply the enclitic form, not the result of mesoclisism with deletion of word-final *n*).

Second, the ban on plural mesoclisism holds even in examples that do not result in *sn#*.

- (50) a. Vénda -n -nos -lo!
 sell.IMP -PL -CL.1PL.DAT -CL.3SG.M.ACC
 ‘Sell us it! (imperative plural)’
 b. *Vénda -(n) -nos -lo -n!
 sell.IMP -PL -CL.1PL.DAT -CL.3SG.M.ACC -PL

As illustrated in this example (due to Rafael Nuñez-Cedeño, pers. comm.), a plural clitic makes mesoclisism ungrammatical even when plural *-n* would not be adjacent to it in a clitic cluster. This suggests that a morphotactic rather than phonotactic explanation is in order.

Finally, note that the Italian and Albanian dialects have *-ni* and other nonsigmatic plural agreement exponents that may also show, if they are disallowed, that phonology alone is not at stake. As Manzini and Savoia (2007:234) remark, “The first person plural presents some asymmetries with respect to the first person singular. In particular, mesoclisism of *ne* (us) is not attested by the data and is given as dubious or impossible by native speakers” of S. Marzano (the question mark in (52), repeated from the source, indicates this judgment).

- (51) {sij'jɔ / 'ŋgrigə} (m)mə ni
 {wake.up / pick.up} CL.1SG.ACC 2PL
 ‘Wake/Pick me up! (imperative plural)’
 (S. Marzano Arbëresh; Manzini and Savoia 2007:235)
- (52) ?'le nnə ni
 leave CL.1PL.ACC 2PL
 ‘Leave us! (imperative plural)’
 (S. Marzano Arbëresh; Manzini and Savoia 2007:235)

- (53) {sij'jɔ / 'ɲgrig} (n)ni {ε / i}
 {wake.up / pick.up} 2PL {CL.3SG.ACC / CL.3PL.ACC}
 'Wake/Pick him/them up! (imperative plural)'
 (S. Marzano Arbëresh; Manzini and Savoia 2007:235)

As (53) shows, the normal position of clitics in imperatives is enclitic. Yet mesocclisis is possible with first person singular (51) but not first person plural (52) clitics, even though there is no potential phonological problem with (52), as the plural clitic in question ends in a vowel. We therefore seek a more principled reason why the GR formalism should be blocked from effecting mesocclisis with plural clitics.

Before we continue, it is important to note that the ban on plural mesocclisis does not extend to reflexive *se*, even though in plural imperatives it is syntactically and semantically plural.

- (54) Siénte -(n) -se -n!
 sit.IMP -PL -CL.REFL -PL
 'Sit down! (imperative plural)'

However, as was shown in section 3, *se* is not plural when GR applies; as Reflexive Impoverishment has applied earlier, *se* is syncretic for number.

4.3 The Two-Clitic melon Hierarchy

According to Harris and Halle (2005), dialectal variation is also found when there is more than one clitic, in terms of the placement of plural *-n* with respect to each clitic. Some speakers allow *-n* to appear after either clitic within the cluster.

- (55) a. Dé -n -me -lo!
 give.IMP -PL -CL.1SG.DAT -CL.3SG.M.ACC
 'Give me it! (plural imperative)'
 b. dé(-n)-me-n-lo, dé(-n)-me-lo-n

Other speakers allow *-n* only after the first clitic.

- (56) dé(-n)-me-n-lo, *dé(-n)-me-lo-n

However, no speakers allow *-n* only after the second clitic.

- (57) *Unattested*: dé(-n)-me-lo-n, *dé(-n)-me-n-lo

In other words, a grammar that allows *-n* after the second clitic in a cluster implies that it allows it after the first one as well. Our aim in section 6.3, therefore, will be to develop an account of the restrictions on mesocclisis that derive this particular implicational generalization.

Before proceeding, we note that the above data from Harris and Halle are not sufficient to establish the empirical generalization. In particular, the speakers who do not allow mesocclisis of both clitics in the cluster *me lo* might simply be speakers who do not allow mesocclisis with *lo* in the first place, due to the person hierarchy. That is, the patterns of variation shown above might

simply be due to the person hierarchy, not to a restriction specifically applying to clusters. The generalization could be confirmed by speakers who do allow mesoclis with *lo*, but not in clusters in which *lo* is the second clitic. Unfortunately, we do not have direct access to a diverse enough range of speakers who allow mesoclis with *lo*, so we have not been able to confirm this. Although we tentatively take the restriction on clitic clusters as a valid generalization, we note that more fieldwork is needed in this particular area.¹⁷

5 Kayne's (2010) Approach and the Three Explananda

Kayne (2010) offers a syntactic reinterpretation of Harris and Halle 2005, which attempts to do away with any postsyntactic mechanisms and to account for displacement (and doubling) entirely with syntactic structures and processes. At the outset, Kayne points out a number of places where Harris and Halle's account overgenerates; he argues that it could potentially metathesize any segment, or any morpheme. As we will make clear in section 6, our morphotactic formalization of mesoclis as being specifically triggered by a Noninitiality constraint on plural *-n* provides a motivating force for these operations. Syntactic movement, too, is a "free" operation, but in practice is limited to cases where its application is motivated. Once a motivation for the application of GR rules yielding mesoclis is in place, these particular arguments of Kayne's therefore dissolve.

More generally speaking, there are two basic types of arguments that an entirely syntax-based approach to displacement and doubling makes against a postsyntactic analysis. The first turns on the apparent redundancy between syntactic and morphological movement. While indeed morphological displacement may look like syntactic movement, we would argue that the two operate on different kinds of structures, for different reasons: syntactic movement is upward and involves the derivational requirements of either the mover or the target in creating a new hierarchical relation, while morphological displacement (and doubling) is due to the language-specific requirements on the linear order of elements. The second type of argument involves the apparent unconstrainedness of the reduplication formalism, but we hope to show that in fact the kinds of restrictions one needs to place on the syntactic account look even stranger within the syntax than they do in the morphology.

To further develop the latter point, we turn to the basic outline of Kayne's analysis. It begins by analogizing mesoclis with multiple agreement, of the kind where more than one verbal

¹⁷ Unfortunately, the generalization cannot be checked with speakers who restrict mesoclis to the higher part of the person hierarchy, that is, speakers who allow mesoclis only with *me* and *se*. The cluster *se me*, although grammatical, is possible only in cases in which *se* is interpreted as a third person reflexive. It is not grammatical with *se* as a second person plural reflexive, which we take as related to the fact that Iberian colloquial second person plural *os* cannot cluster with *me*, whether it is interpreted as reflexive or not: **me os*, **os me*. Since reflexive *se* in imperatives is necessarily second person plural, it cannot cluster with *me* in imperatives, which makes testing mesoclis with this cluster impossible.

element shows evidence of agreement with the same DP, as in (58) (see also Alcázar and Saltarelli 2010).

- (58) Maria è stata lodata.
 Maria is been.F.SG praised.F.SG
 'Maria has been praised.'
 (Italian; Kayne 2010:148)

Kayne's argument, therefore, is that the multiple instances of *-n* found in Spanish doubling cases like *vénda-n-lo-n* (or those in (55b)) involve multiple, independent projections of Agr within the clausal spine. But what about the placement of the clitic itself, sandwiched between the verbal stem and the Agr projection? Kayne argues that this is the result of a sort of clitic climbing, to a position higher than the lowest Agr. Kayne's empirical motivation comes from the observation that the person and case hierarchies, discussed in section 4.1, parallel the linear order of clitics in a clitic sequence, as *se* and *me* appear further to the left (and by hypothesis, higher) than third person clitics. The parallel can be seen in the following Ligurian example, in which first person *me* precedes the negative element *n*, whereas third person *le* follows it:

- (59) U me n le darà nent.
 CL.3SG.NOM CL.1SG.DAT NEG CL.3SG.ACC give.FUT.3SG NEG
 'He won't give it to me.'
 (Ligurian; Parry 1997:244)

Kayne proposes that as in Ligurian, where the first person singular clitic can move above negation but the third person one cannot (at least not the accusative one; subject clitics are typically in a higher domain to begin with), in the relevant Spanish varieties first person clitics can move above plural Agr, yielding mesoclisis, while third person ones cannot. He makes the parallel explicit: "[(59)] is very much like what we see in [(60)], modulo the difference between the plural morpheme *-n* and the negative morpheme *n*" (2010:156).

- (60) De -me -n -lo!
 give.IMP -CL.1SG.DAT -PL -CL.3SG.M.ACC
 'Give me it! (imperative plural)'

The potential unification of clitic ordering within mesoclisis and enclisis is a promising aspect of the analysis, though we will return to it in section 7.1. (Our own explanation of the person hierarchy is found in section 6.5.) For the second aspect of Spanish mesoclisis—its restriction to singular clitics—Kayne appeals to phonological factors (as do Harris and Halle (2005)), an appeal we have argued to be insufficient (see section 4.2). Perhaps more telling is the fact that a purely syntactic analysis of this restriction would be hard pressed to find consistent examples of singular clitics moving higher than their plural counterparts within Romance clitic sequences.

Another parallel that Kayne draws (p. 147) to develop the syntactic analysis involves the suggestion that mesoclisis is like clitic climbing, which can also exhibit doubling in nonstandard varieties, as in (61).

- (61) Juan lo quiere hacer -lo.
 Juan CL.3SG.M.ACC wants do.INF -CL.3SG.M.ACC
 ‘Juan wants to do it.’

However, an important difference between the two configurations is that clitics always have to climb together in Spanish (62), but they don’t necessarily mesocliticize together (cf. (60)).

- (62) a. Juan me lo quiere dar.
 Juan CL.1SG.DAT CL.3SG.M.ACC wants give.INF
 ‘Juan wants to give it to me.’
 b. *Juan **me** quiere dar -lo.
 Juan CL.1SG.DAT wants give.INF -CL.3SG.M.ACC

Kayne in fact acknowledges this difference (p. 164n38). Similarly, there are no dialects of Spanish that exhibit restrictions—in terms of person or number—such that only a subset of the clitics can climb. The potential appeal to mesoclitisis as being parallel to clitic climbing is thereby weakened, as arguably the latter is more directly syntactic.

Of perhaps more immediate concern is the relationship between displacement and doubling within Kayne’s approach. Displacement results when the clitics move above Agr, whereas doubling involves two Agr projections. According to Kayne, “[E]ach *-n* is merged as an independent morpheme in the ordinary syntax” (p. 160). For the derivation of cases such as *vénda-n-lo-n*, the relevant steps, as culled from Kayne’s paper, are as follows:

- (63) a. The lower *-n* induces movement of *vénda* to its immediate left.
 b. The higher *-n* is merged subsequently and induces movement of the object clitic.
 c. The higher *-n* then triggers movement of the verb phrase to its left, yielding *vénda-n-lo-n*.

In an analysis with two separate Agr (*-n*) morphemes, certain problems arise in trying to account for dependencies between the two Agr positions. Given the fact that both *vénda-n-lo* and *vénda-lo-n* are possible, it must be the case that either Agr position can be optionally absent. However, *vénda-lo* as a plural imperative is ungrammatical, a fact that goes unexplained if the optionality of the two Agr morphemes is not linked. Moreover, as we have already noted, there can be cases with three instances of *-n*: for example, *vénda-n-me-n-lo-n*.

In fact, under a purely syntactic account, the plural restriction (e.g., **vénda-n-nos-lo-n* in (50b)) is problematic, because to rule it out, the account would have to ban generation of the higher (i.e., rightmost) *-n* only when the clitic moving above it is plural. However, the lower-generated Agr does not seem to mind what the clitic’s number is, as cases of enclisis demonstrate (e.g., *vénda-n-nos-lo* in (50a)).

The dependency (and lack of *independence*) of these Agrs is found precisely in that they reflect the plurality of the same argument. Kayne’s parallel between Spanish *n*-doubling and Romance languages with multiply agreeing auxiliary-participle constructions such as (58) founders because the latter often exhibit agreement with different arguments as shown in (64) for French.

- (64) Paul les a repeintes.
 Paul CL.3PL.ACC have.3SG repainted.PL
 'Paul has repainted them.'
 (French; Kayne 1989:85)

In this example, the auxiliary agrees with the singular subject argument, while the participle agrees with the plural object clitic. The Spanish cases, however, always show agreement only with the subject; the example in (58) is a passive, and not fully representative. The multiple instances of Spanish *-n*, we contend, show interdependence because they reflect one single syntactic element, multiply copied only in the postsyntax.

For a final argument that the Agr morphemes are not independent, consider yet another dependency that arises, namely, between the number of *-n* affixes and the number of clitics. There can be at most $x + 1$ instances of *-n* in a sequence with x clitics (e.g., no dialect has **vénda-n-me-n-lo-n-n*). Similarly, every instance of *-n* must be right-adjacent to the verb or to a clitic; **vénda-n-me-lo-n-n* is not possible. Though it may be tempting to dismiss such cases as being ruled out by phonology, we note that, to our knowledge, their would-be S. Marzano counterparts with *-ni* are equally unattested. In sum, the free generation of Agr morphemes to account for multiple instances of *-n* in Kayne's syntactic account is much more unrestricted than it may seem.

While the purely syntactic analysis is unsatisfactory to account for the range of restrictions on Spanish mesoclisism, Kayne's paper nonetheless makes an important contribution to the discussion on this topic as it calls for a more developed version of Harris and Halle 2005 that provides motivation for and insight into the patterns of attested and unattested interspeaker variation. We now turn to providing such a version. Our account is formulated within the postsyntax and based on the intuition that the multiple instances of *-n* and their placement reflect specific aspects of the GR rule that acts during morphotactic repair.

6 A Morphotactic Formulation of Constraints on Mesoclisism

We agree with Kayne (2010) that Harris and Halle's (2005) GR as such is just a formalism that does not account for the restrictions described above. However, we argue that, when supplemented with morphotactic constraints, a postsyntactic analysis based on GR can provide an insightful analysis of all the relevant facts of mesoclisism. We propose that mesoclisism arises for the following reason:¹⁸

- (65) *Mesoclisism as a second-position effect*
-n is a second-position clitic within the post-stem clitic domain. Displacement or doubling of *-n* occurs in order to put a clitic to its left.

¹⁸ See Minkoff 1993 and Halle and Marantz 1994:285–288 for analyses along the same lines, but stated as linearization requirements imposed on the pronominal clitics, not on *-n*. We agree that such requirements are needed, but in order to account for a different type of mesoclisism in Spanish, discussed in section 7.2.

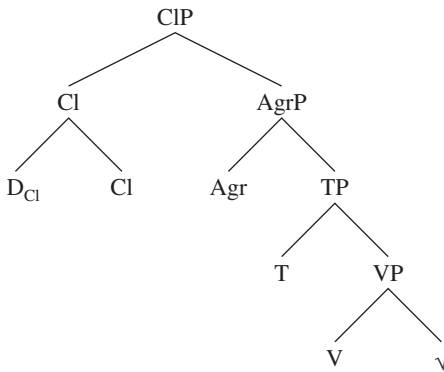
While a Derivation inside Inflection constraint may have been the original source of mesoclis (recall Haspelmath's (1993) proposal in section 1), we propose that (65) is what is synchronically active and that it is more accurate than Derivation inside Inflection, since mesoclis affects clitics such as first person plural *me*, which are clearly not derivational.

In what follows, we implement this idea in more formal terms, as part of a more general analysis of the postsyntax of clitic clusters, and we account for the restrictions on mesoclis in terms of morphotactic constraints. Section 6.1 formalizes our approach to the syntax of clitic clustering, independently of mesoclis. Section 6.2 implements (65) in terms of a Noninitiality constraint that triggers mesoclis, and demonstrates how displacement and doubling are repairs to the constraint. Sections 6.3–6.5 provide restrictions on mesoclis that derive the three explananda in section 4.

6.1 Clitic Clustering

Following Kayne 1991 and much subsequent work, we assume that Romance pronominal clitics surface adjoined to certain functional heads in the clausal spine. We implement here a version of Terzi's (1999) specific proposal, according to which clitics adjoin to a head generated immediately above functional projections associated with verbal inflectional material, notated here as *Cl*.¹⁹

(66) *The syntax of Romance clitics*

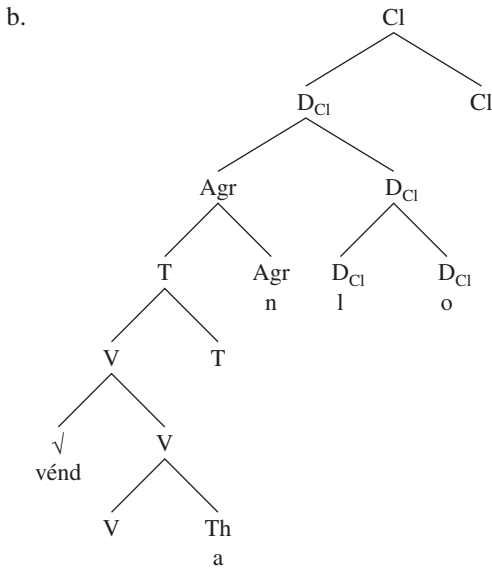


In finite contexts, verb movement to Agr derives proclisis. In imperatives (as well as all nonfinite contexts in Spanish), proclisis is the result of verb movement to a high-peripheral position above

¹⁹ The structure in (66) omits any specifier or complement positions associated with arguments (including subjects). Terzi's (1999) own label for the clitic-hosting head is *F* instead of *Cl*. We use the latter label following a suggestion by Terzi (1999:93). We also reverse the order of T and (subject) Agr with respect to Terzi's practice, to make the structure directly compatible with more explicit accounts of the morphophonology of Spanish verbal inflection (Oltra-Massuet and Arregi 2005). The verb stem is always (at least) bimorphemic (Marantz 1997), containing a categoryless root (√) and a verbal category-fixing head, which we label with a capital letter following Arregi and Nevins 2014.

the clitic-hosting head (e.g., Kayne 1991, Rivero 1994). In Terzi's (1999:93–99) specific implementation, which we adopt here, the verbal complex first adjoins to the clitic in Cl; then, the resulting complex head including the clitic moves to its higher surface position.²⁰ In the case of imperatives, the complex head in Cl has the structure in (67b).²¹

- (67) a. Véndá -n -lo!
 sell.IMP -PL -CL.3SG.M.ACC
 'Sell it! (imperative plural)'



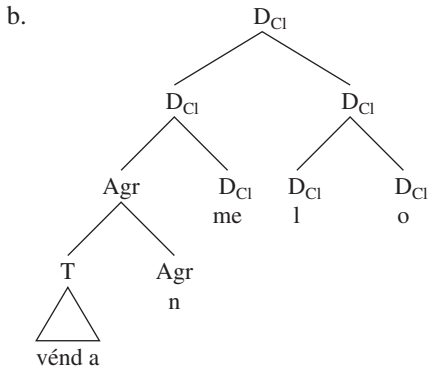
In the rest of the article, we ignore the internal structure of the constituent dominated by the highest T node and omit the Cl projections. Clitic clusters are formed by the adjunction of the dative clitic to the accusative clitic; thus, a form with multiple cliticization has the structure in (68b) (Terzi 1999:99–108).²²

²⁰ Terzi (1999) proposes a further difference between finite and nonfinite contexts: while the clitic is hosted by Cl (labeled *F* in her account) in the former, it is hosted by T in the latter. This presupposes a structure in which T is higher than Agr (see Terzi 1999:92–99 for details), the reverse of the order adopted here (see footnote 19 for discussion). Our implementation preserves the insight that the verb remains low in proclitic contexts, but moves to a high-peripheral position (picking up the clitic on the way) in enclitic environments.

²¹ The structure in (67) also includes a theme position (Th; see Oltra-Massuet 1999, Oltra-Massuet and Arregi 2005) and a complex internal structure for the accusative clitic *lo* (section 3). Both are the result of postsyntactic operations.

²² Unlike in Romance, clitics in clusters can adjoin to separate clitic-hosting heads in Greek, which accounts for the variable order of clitics attested in enclitic position in this language (Terzi 1999:99–108).

- (68) a. Vénda -n -me -lo!
 sell.IMP -PL -CL.1SG.DAT -CL.3SG.M.ACC
 ‘Sell me it! (imperative plural)’



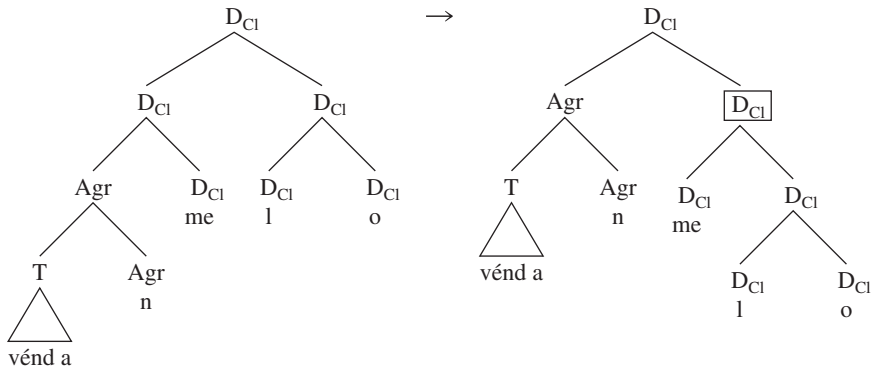
In these syntactic representations, the clitic cluster does not form a constituent separate from its host. In the postsyntactic component, however, *Clitic Clustering* makes a constituent out of adjacent clitics.

(69) *Clitic Clustering*

A node specified as [–strong] (a clitic) is rebracketed to form a constituent with a node specified as [–strong] that it c-commands and that is to its immediate left.

This rule performs the rebracketing that leads to new sisterhood relations, whereby clitics become a cluster (see Williams 2003:chap. 8 for a related set of reassociating operations). It includes the specific statement about c-command so that in a complex clitic node (such as the one constituting *l-o*), the entire clitic subtree *l-o* undergoes rebracketing with *me*, as opposed to just the single clitic node *l*. We assume that the operation of rebracketing is cyclic, meaning that it potentially applies multiple times, starting with the two innermost (i.e., most deeply embedded) clitics.²³ Though examples with multiple clitics meet the structural description of the rule, examples with a single clitic do not.

²³ Although the effects of cyclicity are not visible in cases of enclisis, they derive the attested variation in mesoclitic possibilities, as shown below.

(70) *Clitic clustering in (68)*

Thus, our specific proposal is that, after Clitic Clustering, the clitics and their verbal host form a constituent (rooted at the top D_{Cl} node in (70)), but that within this higher constituent, the clitics form a subconstituent (rooted at the boxed D_{Cl} node in (70)), which we will refer to as the *clitic cluster*.

A number of stress-related facts provide evidence that clitics form a separate postsyntactic constituent within the larger constituent that contains both the clitics and their verbal host. First, proclitics are not part of the domain over which stress is computed. This can be seen most clearly in the present tense, where stress is always on the penultimate syllable.

- (71) Vende. [bénde]
 sells
 ‘She/He sells (things).’

As might be expected, the only exception to this generalization is monosyllabic forms, in which stress is on the only syllable in the verb.

- (72) Va de copas. [bá ðekópas]
 goes of glasses
 ‘She/He goes out drinking.’

This is true even in cases in which proclitics could in principle provide enough syllabic space for penultimate stress.

- (73) Se va de copas.
 CL.REFL goes of glasses
 ‘She/He goes out drinking.’
 a. [seβá ðekópas]
 b. *[séβa ðekópas]

This is expected if proclitics are not part of the domain over which word-level stress is assigned in verbs. Stress-related evidence for treating enclitic clusters as a separate constituent can be seen in their interaction with the three-syllable window restriction on stress in Spanish, according to

which stress cannot be further to the left than the antepenultimate syllable.²⁴ In second person singular imperatives, stress is on the penultimate syllable of the verb.

- (74) Venda eso! [bénda éso]
 sell.IMP that
 ‘Sell that! (formal singular imperative)’

Stress remains on that syllable in the presence of enclitics, even in cases where the result violates the three-syllable window restriction.

- (75) a. Vénda -me eso! [béndame éso]
 sell.IMP -CL.1SG.DAT that
 ‘Sell me that! (singular imperative)’
 b. Vénda -me -lo! [béndamelo]
 sell.IMP -CL.1SG.DAT -CL.3SG.M.ACC
 ‘Sell me it! (singular imperative)’

In addition, for many speakers the clitic cluster (even in cases with a single clitic) has its own (secondary) stress (Roca 1986, Harris 1991).

- (76) a. *Alternative pronunciation for (75a)*
 [béndamé éso]
 b. *Alternative pronunciation for (75b)*
 [béndameló]

All these facts provide evidence that, within the verb-enclitic constituent, the clitic cluster forms a subconstituent separate from the verbal host postsyntactically.

6.2 Noninitiality

Our idea stated in (65) that mesoclisism is the result of a second-position clitic requirement on *-n* requires two more additions to the analysis. First, we propose that *-n* is subject to the following rule, which applies optionally in the postsyntactic component:²⁵

- (77) *n-Extradition*
 In a structure in which plural Agr *-n* is immediately c-commanded by D_{Cl}, insert [–strong] in Agr (notated as Agr_{Cl}).

²⁴ This can be seen, for instance, in English borrowings that have primary stress on the preantepenultimate syllable in the source: *Terminator* is pronounced [termin'ator] or (for speakers more aware of the English pronunciation) [termin'ejtor].

²⁵ Interestingly, there is an additional suffix used in Iberian Spanish imperatives, *-d*, for second person plural colloquial, mentioned in section 4.1. This suffix does not allow mesoclisism to its left (e.g., there is no **Canta-me-d!* ‘Sing it to us!’ alongside grammatical *Canta-d-me!*). We assume that this is because this morpheme is not subject to *n*-Extradition.

The intuition behind this rule is that it transforms the agreement suffix into a clitic-like morpheme in terms of its participation as a mobile element in the domain following the verb stem. This change from affix to clitic is relevant postsyntactically and reflects the more general reanalysis that yields the fluidity between agreement affixes and clitics (Fuß 2005); in the specific case at hand, it causes plural *-n* to participate in Clitic Clustering. Thus, as an effect of this rule, plural *-n* is optionally a [–strong] element—a clitic—in enclitic contexts, and once it participates in Clitic Clustering, it is subject to morphotactic constraints that hold of such sequences.

Second, the second-position requirement itself is formalized in terms of a Noninitiality constraint that governs the order of clitic *-n* within clusters.

(78) *Noninitiality*

Not all instances of *-n* are initial in a clitic cluster.

This constraint is active throughout the postsyntactic component and automatically triggers mesoclisism whenever it is violated. In particular, it triggers the GR rule, which we reformulate as follows:²⁶

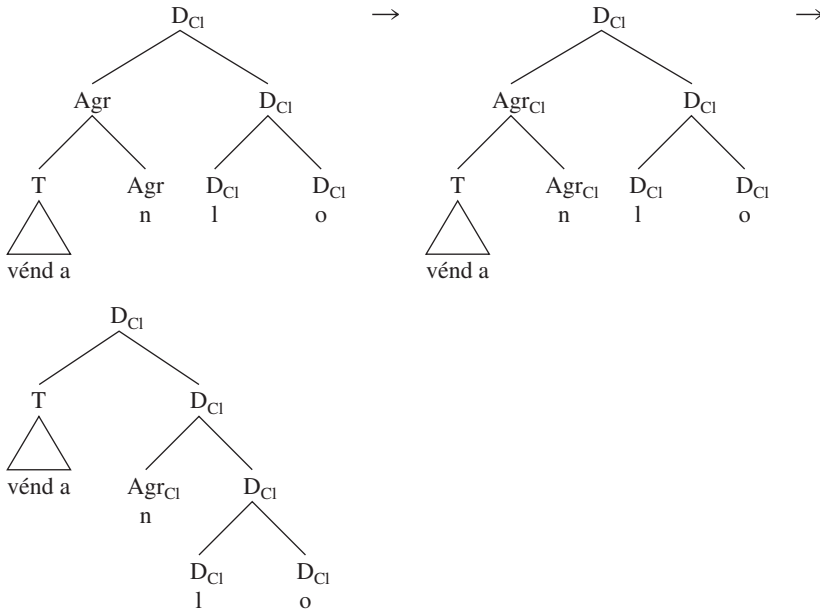
(79) *GR rule*

- a. SD: $X \text{ Agr}_{Cl} \text{ D}_{Cl} Y$, where Agr_{Cl} is [–participant, –singular] and Agr_{Cl} and D_{Cl} are sisters.
- b. SC: Insert
 - [to the immediate left of Agr_{Cl}
 -] to the immediate right of D_{Cl}
 - > < to the immediate right of Agr_{Cl} (Displacement),
 - or
 - > to the immediate right of Agr_{Cl} (Doubling)

In the rest of this section, we illustrate the combined effect of *n*-Extradition, Clitic Clustering, Noninitiality, and the GR rule in deriving mesoclisism in both simple and complex clitic clusters.

Consider first clusters with a single pronominal clitic such as (67). If *n*-Extradition (77) does not apply, the syntactic structure derived in (67) is not altered postsyntactically, and the result is enclisis (*vénda-n-lo*). If *n*-Extradition does apply, clitic *-n* is clustered with *lo*.

²⁶ Our statement of the GR rule in (79) differs from that in (20), adapted from Harris and Halle 2005, in two ways. First, the agreement morpheme *-n* and the clitic to its right are referred to as Agr_{Cl} and D_{Cl} respectively, reflecting our claim in this section that mesoclisism is the result of reordering specifically within clitic clusters (in which agreement is a clitic). Second, these two elements must be sisters. The relevance of the latter difference is discussed below.

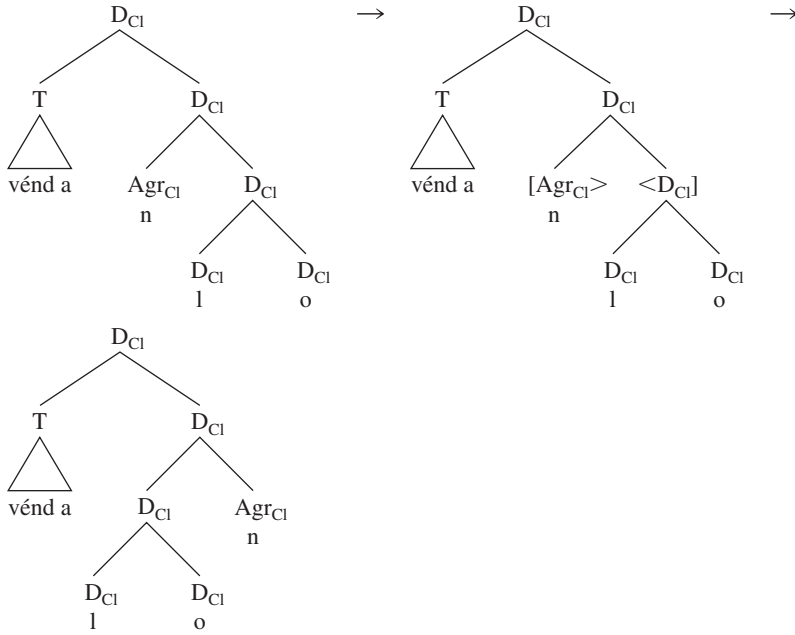
(80) *Application of n-Extradition and Clitic Clustering to (67)*

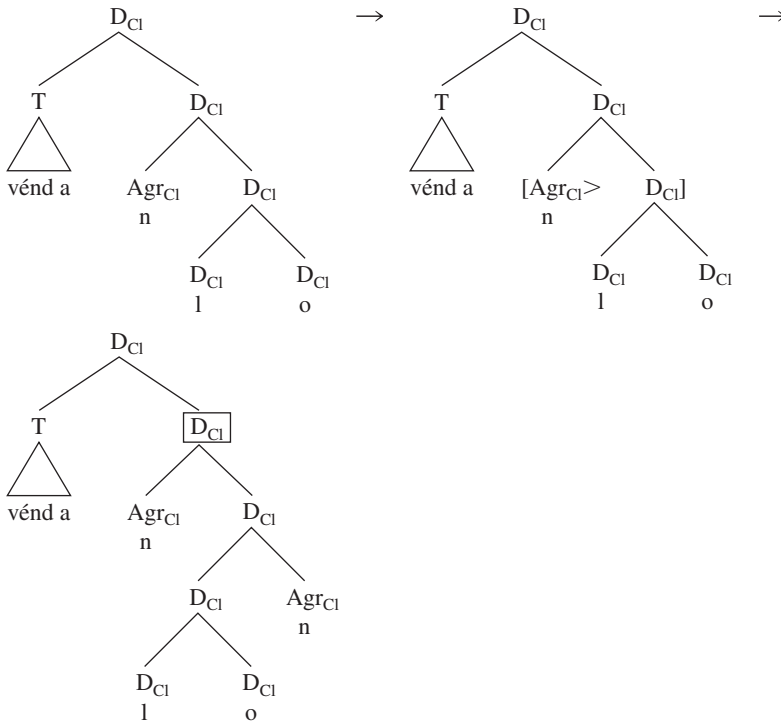
The output, however, violates Noninitiality (78),²⁷ which is repaired with either displacement or doubling by applying the GR rule (79).²⁸

²⁷ Note that Noninitiality is a triggering constraint, and not a blocking constraint. Thus, Clitic Clustering is not blocked in (80), though it creates an environment that violates Noninitiality (which in turn triggers displacement or doubling). We assume, following previous work (Arregi and Nevins 2012:chap. 5), that being blocking or triggering (or both) is a property of each postsyntactic constraint. On the use of triggering and blocking constraints in phonology, see Paradis 1988.

²⁸ Following previous work (Arregi and Nevins 2012:322–326), we assume that the hierarchical structure is affected by the application of mesoclitis operations in such a way that it minimally satisfies the trigger of the rule (in this case, Noninitiality), as well as general constraints on hierarchical structure, such as the bans against branch-crossing (McCawley 1968) and against ternary (and higher) branching (Kayne 1981). In the case of doubling (82), this results in the projection of additional structure to accommodate the added copy of plural *-n*, in order to avoid ternary branching.

(81) *Displacement after n-Extradition and Clitic Clustering (80): vénda-lo-n*



(82) *Doubling after n-Extradition and Clitic Clustering (80): vénda-n-lo*

Thus, the optionality of mesoclitis is ultimately rooted in the optionality of *n*-Extradition, which makes *-n* pattern together with clitics. These examples, with a branching clitic *l-o*, also highlight the need for the sisterhood condition in the structural description of the GR rule (79), which requires the agreement and the pronominal clitics it applies to to be sisters. In the structures above, this ensures that the rule applies to the entire clitic *l-o* and not to its subconstituent clitic *l-* (which, being right-adjacent to *-n*, would otherwise meet the structural condition of the rule).

At this point, it is important to spell out three assumptions that are crucial in understanding the way in which the doubling structure in (82) satisfies Noninitiality (78). First, the constraint is crucially stated with the negative operator outscoping universal quantification over instances of *-n*, so that (82) is a good repair to Noninitiality because of cluster-final *-n*, despite the presence of cluster-initial *-n*. Second, *clitic cluster* in (78) simply refers to a branching clitic (i.e., [-strong]) node. Thus, a terminal clitic node does not violate Noninitiality, even if it contains *-n*. Third, the instances of *-n* that are quantified over by the universal in the statement of the constraint include all instances of *-n* that are dominated by the branching clitic node, even if they are not *immediately* dominated by that node. Hence, the boxed D_{Cl} node in doubling (82) does not violate Noninitiality, due to the presence of the embedded instance of *-n* that is sister to *lo*.²⁹

²⁹ A more precise formulation of Noninitiality that takes all these assumptions into account is the following:

In configurations with more than one pronominal clitic in the cluster, the attested variants can be descriptively classified into three cases.

(83) *Attested variants in clusters with more than one pronominal clitic*

- a. *Enclisis, with in-situ -n*
vénda-n-me-lo
- b. *Mesoclisism with no in-situ -n*
vénda-me-n-lo, vénda-me-lo-n, vénda-me-n-lo-n
- c. *Mesoclisism with in-situ -n*
vénda-n-me-n-lo, vénda-n-me-lo-n, vénda-n-me-n-lo-n

The basic question that the analysis must address is the following. If mesoclisism is a second-position (Noninitiality) effect on *-n*, why are there variants such as *vénda-(n-)me-lo-n* and others in (83b–c), in which *-n* is in apparent third (or higher) position within the cluster? Our analysis would seem to be able to derive mesoclisism with respect to the first pronominal clitic (*vénda-(n-)me-n-lo*), in which *-n* is clearly in second position. The question is thus what triggers displacement or copying further to the right.

The answer provided by our implementation of the second-position analysis, illustrated in detail below, is that this is a *cyclic* second-position effect afforded by the more complex structure present in clusters with more than one pronominal clitic. For instance, consider *vénda-me-lo-n*, with *-n* in apparent third position in the cluster. One can think of this form as being derived by displacement from mesoclitism *vénda-me-n-lo*, which is itself derived by a prior application of displacement.

(84) *Apparent third-position effect as a result of two applications of displacement*

vénda-n-me-lo → vénda- -me-n-lo → vénda-me- -lo-n
└───┘↑ └───┘↑

The first application of displacement yields a clear second position for *-n*: due to Clitic Clustering, *-n* and *me* form a cluster, within which the former must be in second position. Since Clitic Clustering is cyclic, the displacement of *-n* to the right of *lo* from that displaced position is due to further clustering with this outermost clitic, which can result in the Noninitiality-violating cluster *-n-lo* and thus trigger one more application of the GR rule. Thus, the six attested mesoclitism variants can be derived by cyclic iterations of displacement and/or doubling.³⁰

(85) *Mesoclisism with no in-situ -n*

- a. Displacement *vénda-me-n-lo*
- b. Displacement, displacement *vénda-me-lo-n*
- c. Displacement, doubling *vénda-me-n-lo-n*

(i) It is not the case that for all instances of *x* and *y* such that (a) $x \neq y$, (b) *x* is plural *-n*, and (c) *x* and *y* are dominated by a clitic node, *x* precedes *y*.

³⁰ A similarly cyclic analysis relating enclisis to some of the mesoclitism variants discussed here is proposed in Minkoff 1993:187–190, but in the context of a different postsyntactic analysis of mesoclisism. See footnote 37.

(86) *Mesoclisys with no in-situ -n*

a. Doubling

vénda-n-me-n-lo

b. Doubling, displacement

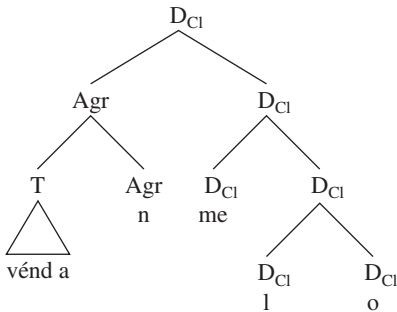
vénda-n-me-lo-n

c. Doubling, doubling

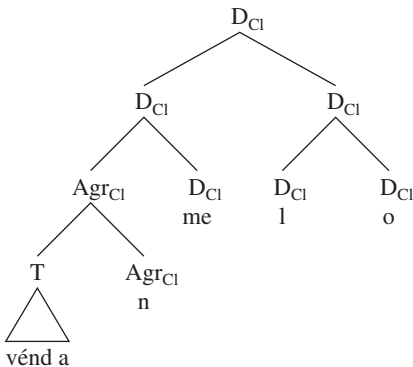
vénda-n-me-n-lo-n

We now illustrate each of these possibilities, beginning with simple enclisis (83a).

If the optional rule of *n*-Extradition does not apply, the result is enclisis (83a). As a result, *-n* does not participate in Clitic Clustering, and Noninitiality is not violated. The resulting structure for *vénda-n-me-lo* is shown in (68b), repeated here.

(87) *Enclisis in clitic clusters*

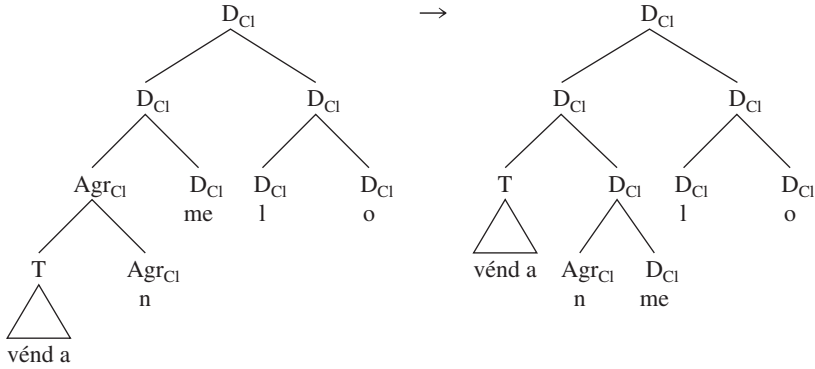
If *n*-Extradition *does* apply, the result is a structure in which *-n* is a clitic.

(88) *n*-Extradition in clitic clusters

As in cases of clusters with a single pronominal clitic, *n*-Extradition feeds application of Clitic Clustering to *-n*, with ensuing violations of Noninitiality that trigger mesoclisys. However, the more complex structure of these clitic clusters yields more derivational options, which result in the six attested mesoclitic variants in (85)–(86), as we now show.

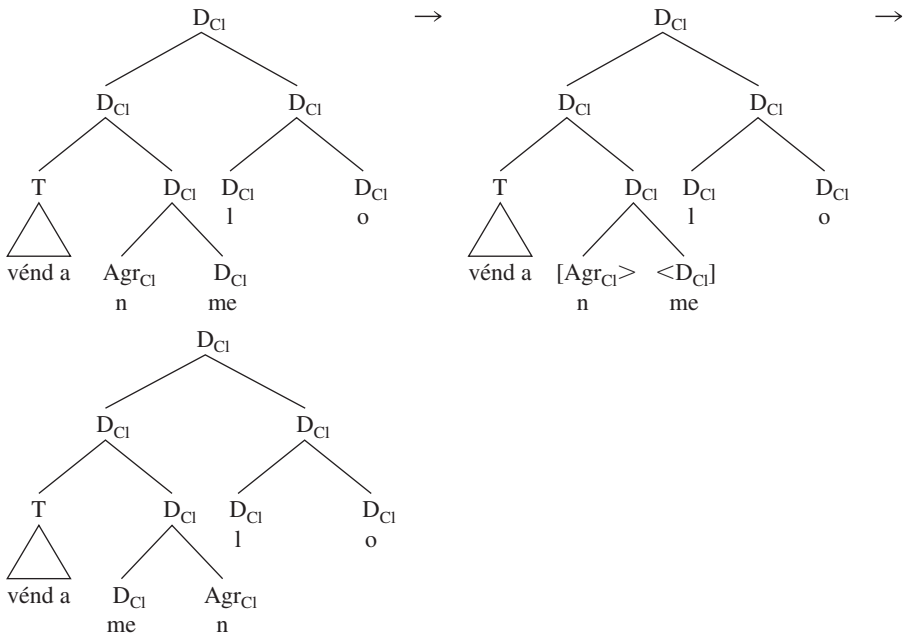
The first step after *n*-Extradition (88) is cyclic application of Clitic Clustering to the two lowest clitics, *-n* and *me*.

(89) *Output of n-Extradition (88) followed by clustering of -n and closest pronominal clitic*

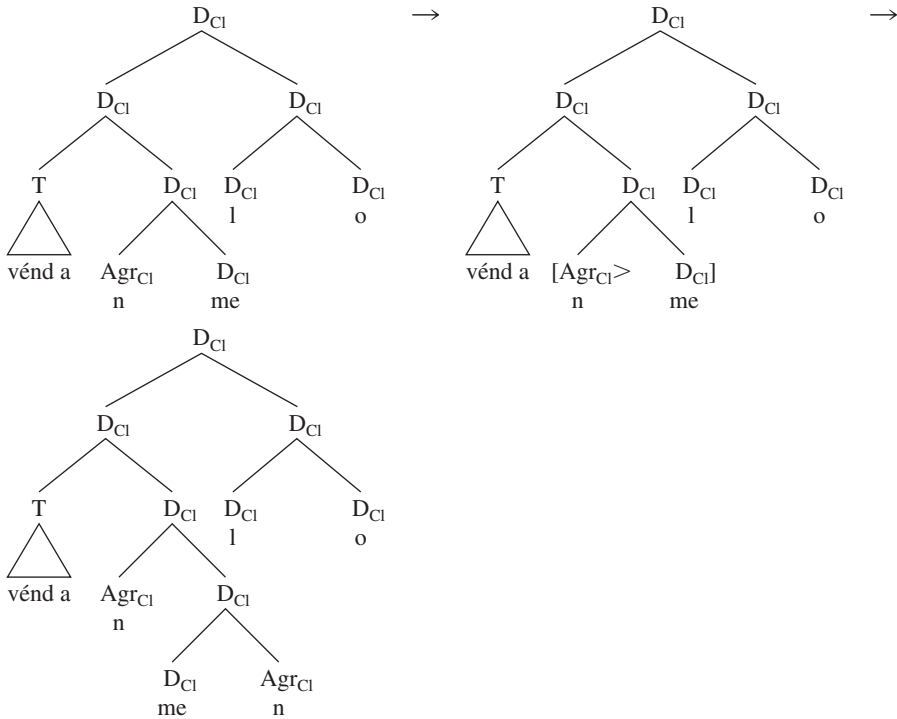


The output violates Noninitiality. The repair can be either displacement, deriving forms with no in-situ -n (the cases in (85)), or doubling, resulting in forms with in-situ -n (the cases in (86)).

(90) *No in-situ -n: Output of (89) repaired by displacement*



(91) *In-situ -n*: Output of (89) repaired by doubling



At this stage in the derivation, further applications of Clitic Clustering, displacement, or doubling yield the six different forms in (85)–(86), as we now show. The next step involves clustering of the top clitic *l-o*. At this point, the structural description of Clitic Clustering, repeated here from (69), is met in two different ways by the structures above.

(92) *Clitic Clustering*

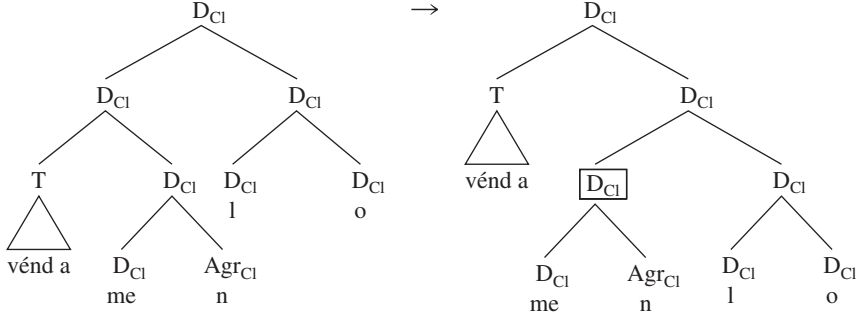
A node specified as $[-strong]$ (a clitic) is rebracketed to form a constituent with a node specified as $[-strong]$ that it c-commands and that is to its immediate left.

This is because in (90)–(91) there are (at least) two clitic nodes in the c-command domain of *l-o* that are to its immediate left: the top one dominating the lower clitic cluster (*n me n*), and the rightmost instance of clitic *n*. Clitic Clustering can thus apply in two different ways, which we will refer to as *high attachment* and *low attachment*.³¹ As we will show, this optionality results in optional application of displacement/doubling of *-n* with respect to *l-o*.

³¹ In the case of doubling (91), an additional clitic node is present dominating *me* and the rightmost instance of *-n*. As the reader can verify, allowing for this *intermediate attachment* does not result in overgeneration, as it yields the same outputs as high attachment. As discussed below, only low attachment results in further applications of displacement or doubling.

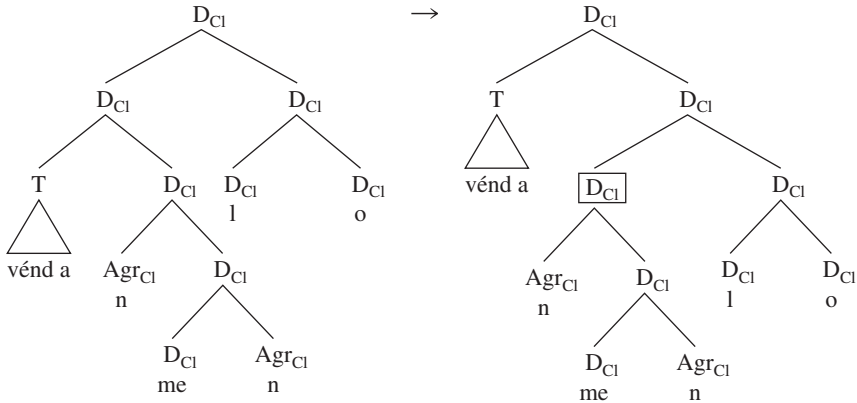
Under high attachment, the output does not violate Noninitiality, and neither displacement nor doubling applies again. We illustrate this first for the case in which high attachment is fed by initial displacement.

(93) *Output of displacement (90) followed by high attachment: vénda-me-n-lo*



Crucially, this structure with high attachment does not violate Noninitiality, since the new application of Clitic Clustering does not disrupt the structure resulting from displacement. Within the lower clitic cluster containing the lower pronominal clitic *me* and *-n* (rooted at the boxed D_{Cl} node), the latter remains in second position, and no repair is needed. A similar result occurs when high attachment is preceded by doubling instead of displacement.

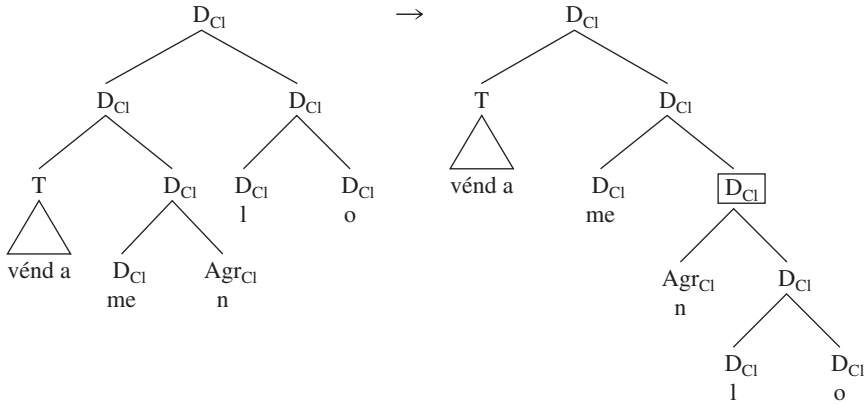
(94) *Output of doubling (91) followed by high attachment: vénda-n-me-n-lo*



Thus, low attachment derives the mesoclitic variants in which the rightmost copy of *-n* surfaces to the immediate right of the first pronominal clitic.

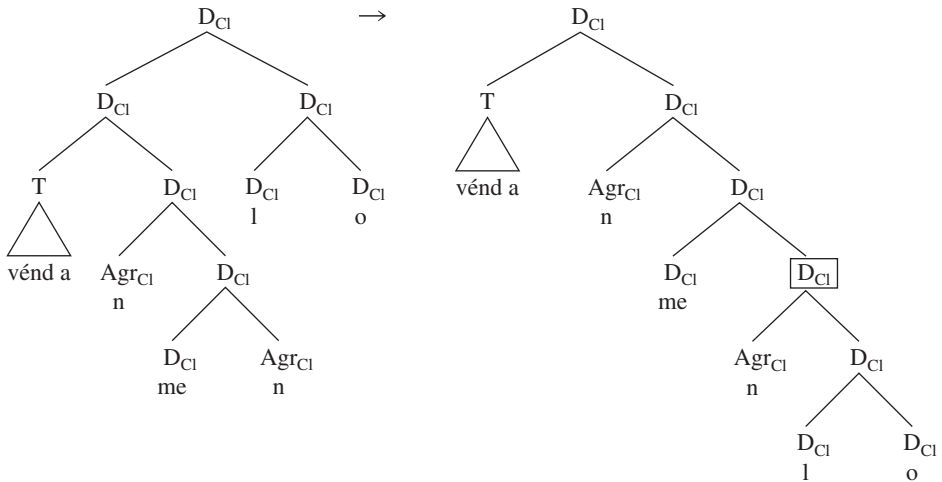
On the other hand, the output of low attachment does violate Noninitiality, which we illustrate first for the case in which low attachment is preceded by displacement.

(95) *Output of displacement (90) followed by low attachment*



This low attachment structure leads to further Noninitiality repairs, since within the newly formed cluster rooted at the boxed D_{Cl} node, *-n* is initial. These repairs yield mesoclitic variants in which a copy of *-n* surfaces to the right of the outermost pronominal clitic *l-o*. The same applies to a low attachment structure when it follows initial doubling instead of displacement.

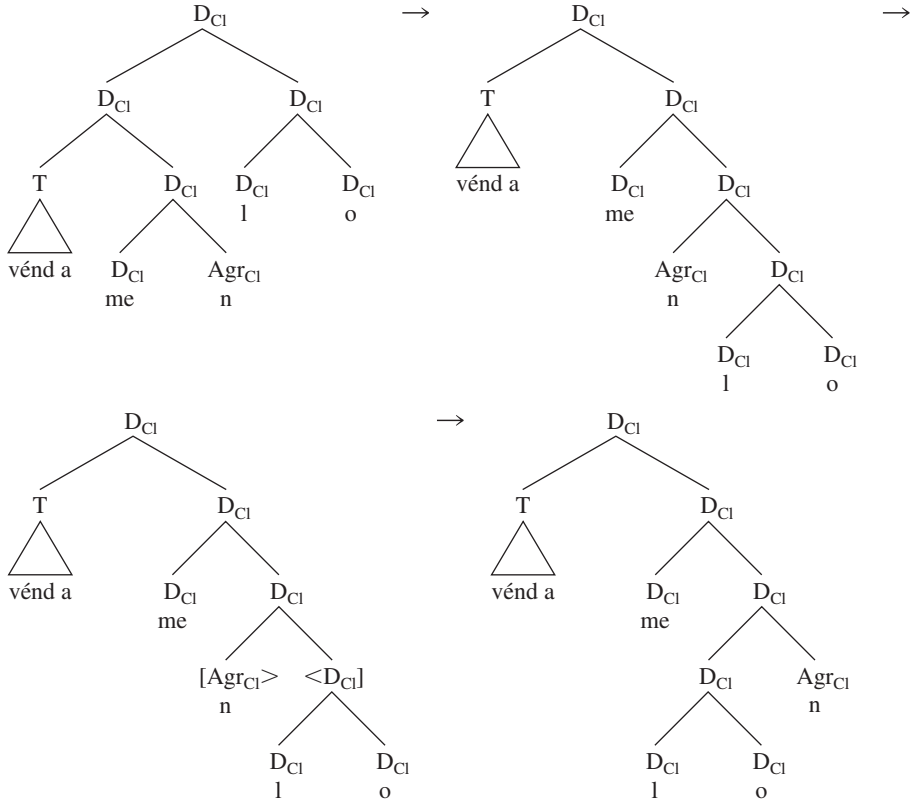
(96) *Output of doubling (91) followed by low attachment*



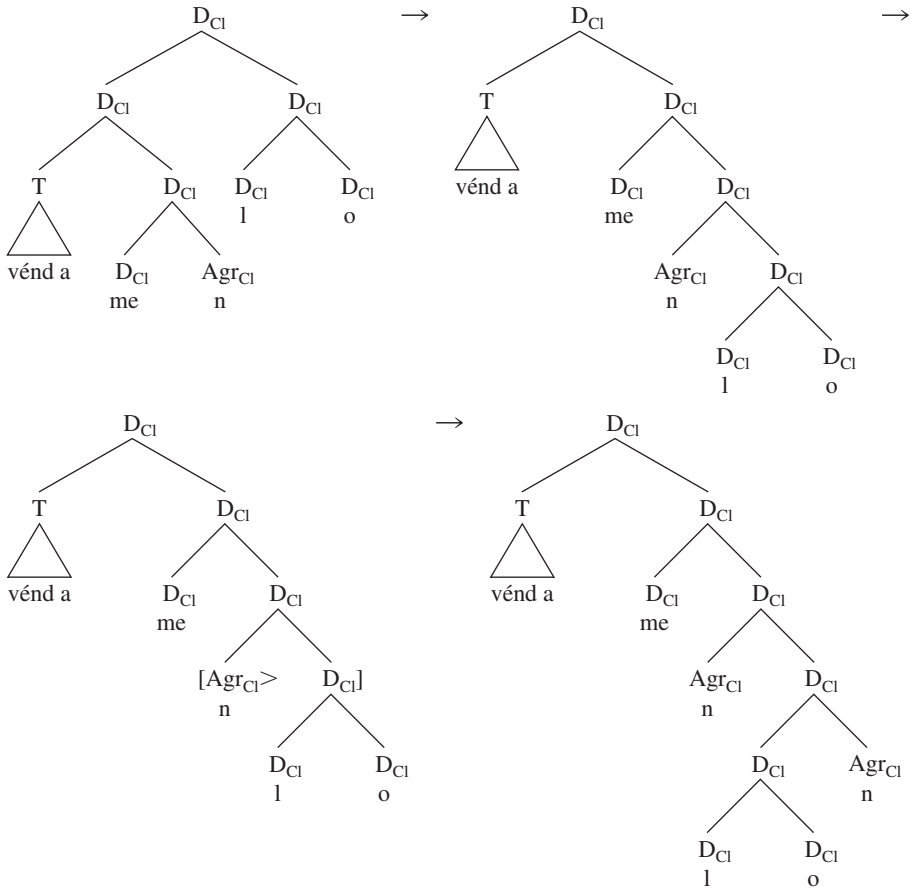
The ensuing displacement or doubling repair only apparently violates the second-position requirement: within the immediate cluster containing *-n*, a copy of it is in second, not higher, position. The derivations for the four variants fitting this description follow.

First, the output of low attachment applied to a displacement structure (95) can be repaired by either displacement or doubling.

(97) *Output of displacement (90), followed by low attachment (95), followed by displacement repair: vénda-me-lo-n*

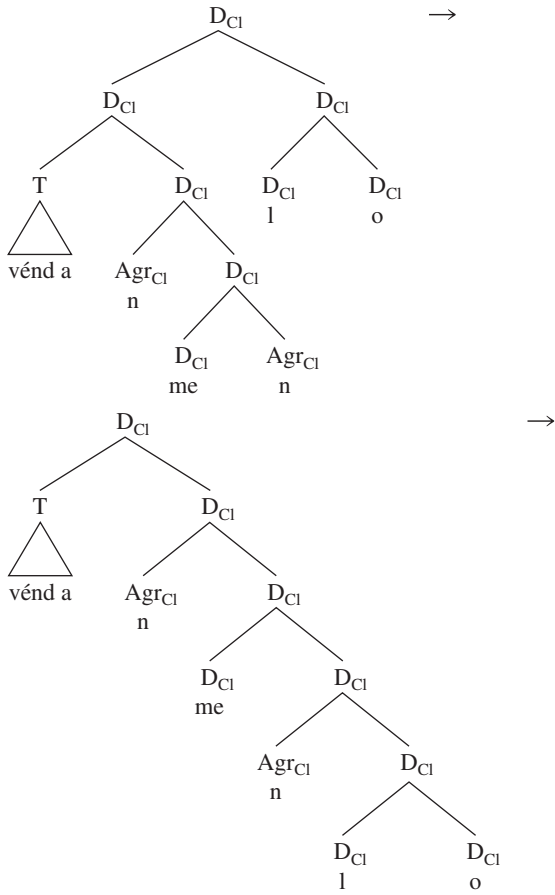


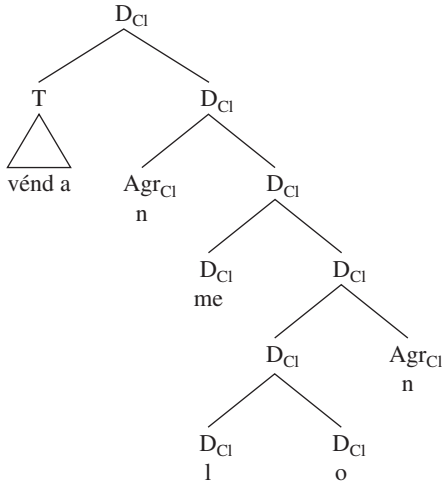
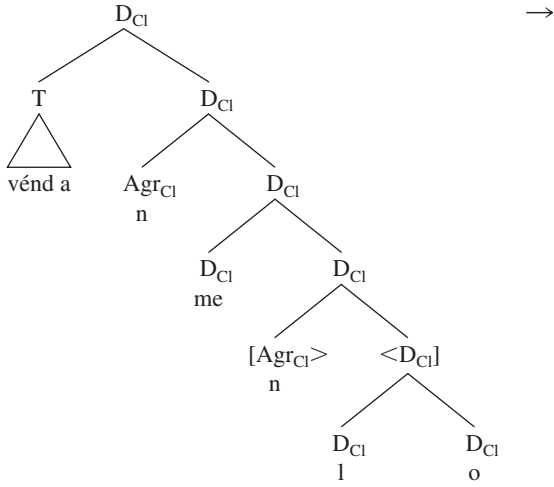
(98) *Output of displacement (90), followed by low attachment (95), followed by doubling repair: vénda-me-n-lo-n*



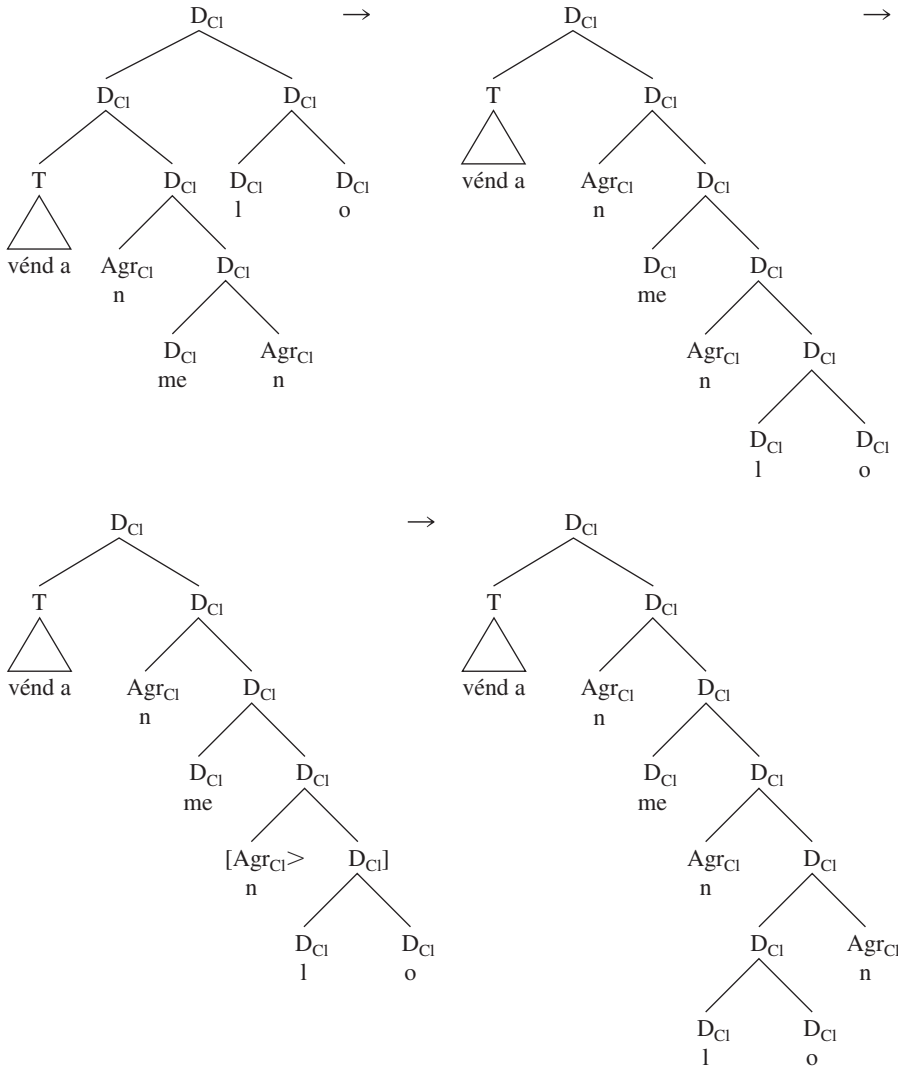
Similarly, the output of low attachment applied to a doubling structure (96) can also be repaired by either displacement or doubling.

(99) *Output of doubling (91), followed by low attachment (96), followed by displacement repair: vénda-n-me-lo-n*





(100) *Output of doubling (91), followed by low attachment (96), followed by doubling repair: vénda-n-me-n-lo-n*



This exhausts all the analytical possibilities—and, as desired, exhausts all the attested forms of mesoclisism in clitic clusters.

To summarize, *n*-Extradition, followed by cyclic application of Clitic Clustering and displacement or doubling repair to clusters violating Noninitiality, derives all the mesoclitic variants, including those found in complex clitic clusters. The availability of all these variants (at least in the least restrictive dialects) is governed by two derivational forks in the road. First, *n*-Extradition is optional; if it does not apply, *-n* is not a clitic and therefore not subject to Noninitiality, resulting in enclisis. Application of *n*-Extradition and subsequent Clitic Clustering violates Noninitiality, which is repaired by displacement or copying to the right of a pronominal clitic (i.e., mesoclisism). In cases of clusters with more than one pronominal clitic, this leads to a second derivational choice afforded by the two ways in which the outermost clitic can cluster with the lower clitics. Under high attachment, *-n* remains to the left of the outermost clitic, since Noninitiality is not violated; under low attachment, further displacement or doubling to the right occurs, since the newly formed cluster of *-n* plus outer clitic violates Noninitiality.³² Crucially, Noninitiality is an obligatory constraint, and apparent surface violations of the second-position requirement in some of the mesoclitic variants are due to other factors that influence the course of the derivation.

In the following sections, we provide an account of the different explananda discussed in section 4, some of which place dialect-specific restrictions on the derivational choices discussed above.

6.3 Deriving the melon Hierarchy

Recall the *melon* hierarchy from section 4.3, under which no speaker allows mesoclisism *only* to the second pronominal clitic in a cluster. Given the derivations provided in the previous section, a natural explanation emerges. The cyclic character of these derivations is such that *-n* will always be clustered with the closer clitic first, hence will have an opportunity to repair Noninitiality immediately. Displacement of *-n* to the position after the first clitic is thus available in all dialects that initiate *n*-Extradition.

After the first step of displacement, clustering of the higher clitic to an adjacent clitic node can proceed either by high attachment (i.e., to the clitic constituent formed by *-n* and the inner clitic, as in (93)–(94)) or by low attachment (i.e., just to *-n*, as in (95)–(96)). Only low attachment will result in a configuration that freshly violates Noninitiality and thereby trigger further displacement to the right of the outer clitic.

Therefore, what prevents some speakers from displacing *-n* all the way to the end of the clitic cluster is simply a restriction on high attachment. Those who allow both high and low attachment will allow either *-me-n-lo* or *-me-lo-n*. Given the optionality between high and low

³² Interestingly, optionality in mesoclisism could be entirely reduced to the way Clitic Clustering applies. In particular, the very first cyclic step of Clitic Clustering depicted in structures such as (80) could also be applied in two ways, by rebracketing the pronominal clitic with either the top or bottom Agr_{Cl} node. As in more complex cases, the latter option (which is the one assumed in (80)) violates Noninitiality for *-n* and leads to mesoclisism by displacement or doubling. However, the former option does not violate the constraint, resulting in enclisis. If this analytical optionality in terms of the rebracketing site proves empirically correct, the rule of *n*-Extradition would then be obligatory in the dialects that have mesoclisism. Not having explored all the consequences of this hypothesis, we leave it as a matter for future research.

attachment, the question that arises is why no speakers allow only low attachment. The answer to this question can be grounded in locality: there is no clear grammatical bias that would restrict speakers to the hierarchically more distant node satisfying a structural description.

6.4 *The Number Restriction*

We now turn to the observation that mesoclis is never occurs with plural clitics, even in cases where one might expect that a coda restriction is not at play, such as **vénda-nos-lon*, which would be phonotactically well-formed (see section 4.2). Our explanation is cast in terms of an intervention constraint on the GR rule.

- (101) A [–singular] element may not move across another [–singular] element to satisfy Noninitiality of *-n*.

Returning to the structural description of the basic GR rule in (79), repeated in (102), the intervention constraint can be incorporated into the additional constraint in (103).

- (102) *GR rule*
- a. SD: $X \text{ Agr}_{\text{Cl}} \text{ D}_{\text{Cl}} Y$, where Agr_{Cl} is [–participant, –singular] and Agr_{Cl} and D_{Cl} are sisters.
 - b. SC: Insert
 - [to the immediate left of Agr_{Cl}
 -] to the immediate right of D_{Cl}
 - $> <$ to the immediate right of Agr_{Cl} (Displacement)
 or
 - $>$ to the immediate right of Agr_{Cl} (Doubling)

- (103) *Plural Intervention Constraint on (102) (all dialects)*
 D_{Cl} is not [–singular].

Although the term *intervention* here may recall Rizzi's (1990) Relativized Minimality, we emphasize that plural *-n* is not undergoing *syntactic movement* (in fact, even on Kayne's (2010) analysis, where it is the clitics that are moving). We take the existence of such parallel though distinct constraints on displacement operations across distinct modules to reflect an organization of the grammar where particular computational mechanisms may be reused, which is of course distinct from viewing both operations as resulting from applications of the same process within a single module. The fact that this constraint holds across all dialects means that the rule of *n*-Extradition (which is optional throughout all the relevant varieties) cannot take place in the presence of plural clitics—if it did, a crash would result.

However, importantly—and this is a property of our general morphotactic approach to microvariation—we contend that there may be a second implementation that learners internalize to yield the number restriction. This one is stated specifically in terms of movement across internally complex clitics.

- (104) A clitic may not move over an internally complex clitic to satisfy Noninitiality on *-n*.

This can be incorporated into the structural description of the mesoclis rule in (102) as follows:

(105) *Nonterminal Constraint on (102) (dialectal)*

D_{Cl} is a terminal node (i.e., is not internally complex).

The consequence of this, given the operations of fission triggered within all plural clitics by the constraints on joint exponence in (35b–c) and resulting complex subtrees such as (36)–(37), is that no displacement is possible for *any* plural clitic, because any plural clitic in Spanish will necessarily involve a branching D_{Cl} sister node to the erstwhile metathesizing *-n*.

Of course, the specific restriction in (105) causes blocking only in the case of clitics that have undergone fission. Therefore, there may be language varieties in which fission-triggering constraints such as (35b–c) do not apply; hence, (105) will not be at issue. Nonetheless, recall that there is an additional, distinct representational constraint on plural clitics (103), which holds for all speakers. Now, given that the number restriction empirically holds across *all* dialects and that there are two ways to derive it, how do we know which implementation—(103) or (105)—a given speaker has internalized? In fact, we will show that there are consequences of choosing one or the other. Specifically, choosing the implementation in terms of complexity will also rule out mesoclitisis with third person accusatives, as these undergo gender fission, hence are internally complex even in the singular. We return to this in the next section.

6.5 *The Person and Case Hierarchies*

Another explanandum, pointed out in section 4, is the person hierarchy, repeated here from (42).

(106) *Mesoclititic person hierarchy: Nonthird person over third person*

se, me > lo, la, le

According to this hierarchy, some speakers allow all clitics to participate in mesoclitisis, while others allow only nonthird person clitics to do so. We will focus on the latter group, where the restriction in question can be viewed in terms of an intervention constraint on the structural description of the GR rule. Specifically, since the *-n* ending in the imperatives in question is postsyntactically [–participant] (recall from section 3 that *-n* is the result of 2PI Impoverishment or Formal Impoverishment, which yield neutralization of second and third person forms), the relevant restriction bans displacement operations from moving it across third person clitics.

(107) A [–participant] element may not move across another [–participant] element to satisfy Noninitiality of *-n*.

Returning to the structural description of the basic GR rule in (79), repeated in (108), the intervention constraint can be incorporated into the additional constraint in (109).

(108) *GR rule*

- a. SD: $X \text{Agr}_{Cl} D_{Cl} Y$, where Agr_{Cl} is [–participant, –singular] and Agr_{Cl} and D_{Cl} are sisters.
- b. SC: Insert
 - [to the immediate left of Agr_{Cl}
 -] to the immediate right of D_{Cl}
 - > < to the immediate right of Agr_{Cl} (Displacement)

or
 > to the immediate right of Agr_{Cl} (Doubling)

- (109) *Nonparticipant Intervention Constraint on (108) (dialectal)*
 D_{Cl} is not [-participant].

We leave open the question of why (109) is limited to some speakers, whereas the Plural Intervention Constraint (103) is found across all mesoclisal varieties. It may be that as learners generalize from the observed patterns, *-n* is more clearly recoverable as [-singular], whereas its identity as [-participant] is less direct, given that it is syntactically second person and undergoes subsequent impoverishment.

This particular implementation in terms of an intervention constraint on GR operations stated in terms of [-participant] features makes an important prediction for the Italian and Albanian varieties discussed in Manzini and Savoia 2007, 2011, namely, that when the plural imperative suffix is specific to second person (and not syncretic with third), any intervention constraints that are imposed on the person features of the clitics it crosses will yield a hierarchy different from the one in (106).

We now turn to the case hierarchy, repeated from (43).

- (110) *Mesoclitic case hierarchy: Dative third person over accusative third person*
 le > lo, la

How are we to derive those dialects that allow mesoclisal with all singular clitics except third person accusatives? We argue that such speakers have extended their implementation of the number-complexity constraint in (105) to all complex clitics, automatically. The ban on displacing a clitic over an internally complex clitic for cases resulting from number fission can thereby extend to those resulting from gender fission. Returning to the structural description of the basic GR rule in (108), the intervention constraint applicable to gender-bearing clitics results from the following constraint, repeated from (105):

- (111) *Nonterminal Constraint on (108) (dialectal)*
 D_{Cl} is a terminal node (i.e., is not internally complex).

A consequence of the interaction between (111) and the structures that result from the fission process described in section 3 (see (37)) is that because *any* accusative clitic will have gender fission, no displacement will be possible over such internally complex clitics. Since datives are not subject to gender fission, they will allow displacement to occur even in dialects that have adopted (111).

To summarize the patterns of variation within the case hierarchy, dialects in which accusative, gender-bearing *lolla* cannot mesoclitize have the Nonterminal Condition in (111)—which also derives no mesoclisal with plurals. By contrast, in dialects in which *lo/la* can in fact mesoclitize, it is the Plural Intervention Condition (103) that prevents plural mesoclisal. However, the absence of any nonterminal constraint—whether for complex D subtrees that have undergone number fission or for those that have undergone gender fission—means that any singular third person clitic can undergo metathesis.

6.6 *Interim Summary: Interspeaker Variation Derives from Additional Morphotactic Constraints*

To summarize sections 6.3–6.5, we have proposed additional morphotactic restrictions on the GR formalism that account for the three explananda outlined in section 4. We have accounted for the *melon* hierarchy in terms of constraints on attachment preferences in rebracketing, claiming that no dialect would specifically prefer low but not high attachment when identifying a clitic node for rebracketing. In terms of ϕ -featural restrictions, we have proposed that the person hierarchy and the number restriction are due to additional morphotactic intervention constraints imposed upon the GR rule; whether speakers and dialects include these constraints varies. Finally, also in terms of variation, there is another way to derive the number restriction, based on a constraint on the complexity of the metathesizing clitic; this in turn rules out mesoclitis of both number-bearing and gender-bearing clitics for the relevant speakers.

7 Open Problems for Further Analysis

In this article, we have developed a morphotactic analysis combined with the GR formalism to provide advances in modeling mesoclitis. More broadly, we contend that our account demonstrates the benefits of a division of labor between syntactic and postsyntactic mechanisms for morpheme order. The claim is that there is no fundamental syntactic difference between grammars that allow mesoclitis and those that do not, and that the variation found among the former is to be localized within morphotactically grounded constraints. This obviates the need for appeal to ill-understood syntactic constraints on the generation of Agr heads and movements around them. Put differently, the temptation to do everything within one module and avoid the apparent “redundancy” of having two similar but distinct modules is a blunt application of Occam’s razor. While one could in fact type an entire novel using only a smartphone (and thus throw away a redundant laptop), arguably there are other tools at hand that remain better-suited for certain labors.

The task of understanding mesoclitis in all of its details is not finished, however. In this section, we outline a few challenges and areas for further research that face all approaches to this phenomenon, however they may be cast.

7.1 *Mesoclitic Orders vs. Other Cluster Orders*

In our analysis, mesoclitis is derived from enclisis, by metathesis of the relevant clitics (cyclically in the case of more than one) with the plural *-n* that ends up flanking them. In Kayne’s (2010) analysis, the relation between enclisis and mesoclitis is even more direct, to the point where he specifically emphasizes the parallels with clitic ordering in a cluster as found in proclisis/enclisis. Thus, the properties of the relevant clitics that determine leftward (i.e., higher, for Kayne) order in clusters will in turn determine their relative order with respect to *-n* and indirectly derive the person hierarchy.

Given this perspective, we do not expect differences between the linear order of clitics in enclitic (or proclitic) environments and their relative order with respect to displaced inflection in mesoclitis: if clitic *x* can mesocliticize but clitic *y* must remain enclitic in the same context, then

x should precede *y* in purely enclitic (or proclitic) environments. Divergences can be handled within our framework, by additional morphotactic constraints imposed on mesoclitic orders, but are certainly not expected. On Kayne's analysis, by contrast, they are essentially impossible to derive, given that the explanation for the person hierarchy as it stands crucially depends on this isomorphism.

In Spanish, since the relative order of clitics in enclisis and proclisis correlates with their ability to undergo mesocclisis, little can be made of this theoretical possibility. Some provocative data, however, come from the Arbëresh varieties discussed by Manzini and Savoia (2011:1114). They note that throughout Arbëresh, third person dative clitics precede the middle-passive clitic [u] in nonmesoclitic environments, as illustrated with proclitics in Portocannone in (112), but that in mesoclitic contexts in S. Marzano (a different dialect, but with the same morphemes), the middle-passive clitic precedes inflection (113a), but third person dative clitics follow it (113b) (repeated from (15)).

- (112) i u tʃa-x jə bukjer
 CL.3SG.DAT MP broke-MP a glass
 'A glass broke on him.'
 (Portocannone Arbëresh; Manzini and Savoia 2011:1114)

- (113) a. sij'jɔ-γ -u -ni
 wake.up-MP -MP -2PL
 'Wake up!'
 (S. Marzano Arbëresh; Manzini and Savoia 2011:1114)
 b. 'hua -nni j a
 say -2PL CL.3SG.DAT CL.3SG.ACC
 'Say it to him!'
 (S. Marzano Arbëresh; Manzini and Savoia 2011:1104)

The general point that Manzini and Savoia (2011) wish to make with this contrast is that if the relative order of clitics with respect to inflection in mesoclitic contexts does not correlate with the order of clitics in purely enclitic or proclitic environments, then a climbing explanation for the hierarchy is not in order—certainly a worthwhile point to explore. However, to make this point more forceful, it would be ideal to find paradigms like (112)–(113) with comparable data from within the same dialect, as well as further illustration of the contrast between clitics that mesocliticize and those that do not, as in (113), but within the same cluster. We hope that further work on mesocclisis, wherever it may be found, can shed light on this question, given its theoretical relevance for a syntactic or a morphotactic analysis.

7.2 *Instances of -n with No Original Source*

We have argued that *-n*, when reanalyzed as part of the postverbal domain by *n*-Extradition, undergoes displacement or doubling to satisfy a second-position requirement. While this exhausts the description of imperatives, intriguing cases are found in nonstandard Spanish, where the verb

is infinitival (114b) or gerundive (115b) and an *-n* follows clitics (data from Harris and Halle 2005:213; cf. the standard enclitic forms in (114a), (115a)). In these cases, there is no original source for the *-n*, as these nonfinite forms do not otherwise show agreement.

- (114) a. Quiere -n ver -me.
 want.PRS.IND -PL see.INF -CL.1SG.ACC
 ‘They want to see me.’
 b. Quiere -n ver -me -n.
 want.PRS.IND -PL see.INF -CL.1SG.ACC -PL
- (115) a. Está -n besando -se.
 be.PRS.IND -PL kissing -CL.REFL
 ‘They are kissing each other.’
 b. Está -n besando -se -n.
 be.PRS.IND -PL kissing -CL.REFL -PL

We will refer to speakers with these specific types of mesoclitisis as *vermen* speakers.

It may be tempting to view these instances of postclitic *-n* as being copies of plural agreement in the matrix finite verb (*quiere-n* and *está-n* in the examples above).³³ However, it is straightforward to find examples in which this is not a possible analysis, as they involve postclitic *-n* in a nonfinite clause with no possible source in a finite verb. For instance:

- (116) a. Escuchaba el ruido de la gente, de los esferos moviénd-o -se -n ...
 listen.IPFV.3SG the noise of the people of the pens moving -CL.REFL -PL
 ‘He listened to the noise of the people, of the pens moving, ...’
 b. ... con motivo de cumplir -se -n los cincuenta años de aquel viaje ...
 with reason of turn.INF -CL.REFL -PL the fifty years of that trip
 ‘... because it’s been fifty years since that trip ...’
 (Mare to appear:6)

Postclitic *-n* occurs on a gerund in (116a)³⁴ and on an infinitive in (116b)³⁵. Neither example has another occurrence of *-n* on a finite verb. Furthermore, unlike in (114)–(115), the subject of the

³³ We thank an anonymous reviewer for bringing this up as a possible analysis of sentences of this type.

³⁴ The original example cited by Mare is found at <http://www.calameo.com/books/002937235545338fb2644>. The rest of the sentence includes further instances of postclitic *-n* on a gerund with no possible source on a higher finite verb: *los pupitres arrastrando-se-n, hojas rompiendo-se-n, solo ruido, voces chillonas y ásperas de las cuales no daban gusto oír* ‘the desks being dragged, sheets being torn, only noise, loud and rough voices that weren’t pleasant to hear’.

³⁵ The full sentence (from <http://www.diariovasco.com/pg060716/prensa/noticias/AltoUrola/200607/16/DVA-A LU-028.html>) does not have a possible source for *-n* on a finite verb: *Miguel confiesa que está pinchando para animar a sus compañeros y confía en que se pueda hacer, por lo menos, una cena con motivo de cumplir-se-n los cincuenta años de aquel viaje que les marcó en su infancia* ‘Miguel admits that he’s pushing and encouraging his friends, and is confident that at least a dinner can be held because it’s been fifty years since that trip that marked their childhood’.

nonfinite verb is overt (*los esferos* ‘the pens’ and *los cincuenta años* ‘the fifty years’, respectively), not a PRO whose controller could potentially trigger overt plural agreement on a finite verb. We take this as evidence that postclitic *-n* on nonfinite forms has no original source on a finite verb, even though examples such as those in (114)–(115) might lead one to conclude that it does.

The infinitival and gerundive forms have in common with the imperatives on which we focus that all three are enclitic forms in the standard variety (and, in our analysis, at the output of the syntax). Under Kayne’s (2010) analysis, one might say that the appearance of a final *-n* on all three is expected; there is simply a high *-n*, to which the entire gerund or infinitive phrase moves. However, this movement is obligatory only in the presence of a clitic (Harris and Halle 2005:213).

- (117) *Está -n besando -n.
 be.PRS.IND -PL kissing -PL
 ‘They are kissing.’

The apparent simplicity of the movement account lapses, and about (117), Kayne suggests it is illicit because the high *-n* (the one following the gerundive) “requires a (certain kind of) filled specifier” (p. 165).

Let us seek a more principled reason why this *-n* sprouts only in the presence of a clitic—given that the infinitival and gerundive morphology “shouldn’t” have the *-n* in the first place. We would like to suggest that the speakers in question have inverted the figure-ground relation between *-n* and clitics: rather than formulating a noninitiality requirement on *-n*, speakers who are exposed to metathetic forms such as *véndalon* might instead formulate a *nonfinal* requirement on the clitics. If so, then (114) and (115) can be understood as follows:

- (118) For *vermen* idiolects, the clitic has a *nonfinal* requirement (“Nonfinality”).

The intuition behind (118) is that forms like (114b) and (115b) involve the sprouting of an *-n* item exactly to shield the clitic from final position. What however, is the source of this *-n*, given that it is not visible on the verbal form itself? If pursued to its consequences, this proposal would mean that the plural feature *is* morphosyntactically present on the infinitive or gerundive, though realized with zero.³⁶ However, this plural feature can undergo displacement, of the kind witnessed throughout the derivations in section 6, but *prior* to Vocabulary Insertion. The morphotactic motivation for this displacement from the nonfinite form to the position after the clitic is to provide a rightward shield for the clitic in these dialects. Given that this displacement occurs prior to Vocabulary Insertion, it enables this displaced Agr to be realized as *-n* in its postclitic form, while its original copy that is right-adjacent to the nonfinite form is realized as zero.

³⁶ Under this analysis, the relevant nonfinite forms in Spanish are like inflected infinitives in Portuguese (e.g., Raposo 1987, Pires 2006).

As discussed by Minkoff (1993), there is suggestive further evidence for a Nonfinality requirement on clitics that can be satisfied by displacement of plural material to their right.³⁷ Specifically, if plural clitics such as first person plural *nos* can in fact be decomposed into bimorphemic *no-s*, as in our analysis in section 3, then displacement of the plural *-s* portion could indeed provide a buffer against Nonfinality for a clitic that is in turn to *its* right. Such cases are in fact found in clitic clusters, as in (119b), from Harris and Halle 2005:196 (cf. standard placement of *-s* in (119a)).

- (119) a. Vénda -no -s -lo!
 sell.IMP -CL.1PL.DAT -PL -CL.3SG.M.ACC
 ‘Sell it to us! (imperative singular)’
 b. Vénda -no -lo -s!
 sell.IMP -CL.1PL.DAT -CL.3SG.M.ACC -PL

Considering (119), and the fact that plural morphemes may displace to the right of clitics even when they themselves originate in an earlier clitic, the logical possibility arises that such displacement could occur *prior* to Vocabulary Insertion. This would have the startling result that a plural morpheme originating on a first person plural verb could receive an elsewhere realization as *-n* if it found itself displaced to the rightmost edge of a clitic cluster. Doubling forms of the type in (120b), observed by Mare (to appear:9–12) confirm this prediction, as the final morpheme *-n* seems to be originating within the plural hortative verb where its features have been realized as *-s* (cf. the standard enclitic form in (120a)).³⁸

- (120) a. Dé -mo -s -le ánimos.
 give.PRS.SBJV -1PL -PL -CL.3SG.DAT courages
 ‘Let’s encourage him/her!’
 b. Dé -mo -s -le -n ánimos.
 give.PRS.SBJV -1PL -PL -CL.3SG.DAT -PL courages
 ‘Let’s encourage him/her!’

Research on such forms is still incipient, but we hope that increased formalization of the GR formalism within a cascaded derivational model of postsyntax will provide tools for understanding variants of this shape and how they may reflect a reinterpretation of the relevant morphotactic constraint as targeting the clitic itself.

³⁷ In fact, Minkoff (1993) claims that data such as (119b) and the *n*-displacement forms that are the focus of this article are both due to postsyntactic displacement of clitics to the left of the plural suffix (*-s* or *-n*), in response to a second-position (from the end) requirement on clitics. Although such an analysis accounts for multiple-mesocclisis variants in which plural *-n* outflanks more than one clitic (e.g., *vénda-me-lo-n* ‘Sell it to me!’), it cannot be straightforwardly extended to variants in which *-n* is sandwiched between the two clitics (e.g., *vénda-me-n-lo*), as the second clitic in the sequence is final in the word. Similar comments apply to Halle and Marantz’s (1994) postsyntactic analysis of mesocclisis.

³⁸ In appendix A, we analyze *-mos* as an atomic exponent of first person plural agreement. Examples such as (119b) strongly indicate a polymorphemic analysis in which *-s* in *-mo-s* is in fact a separate realization of number, as suggested by our parse and glosses in these examples.

7.3 Prosodic Factors Conditioning Optionality and Variability

As emphasized from the outset, mesoclisisis is largely an optional phenomenon, and we have not gone into great detail in discussing the factors that might condition its greater rates of application. Here, we outline a few that appear relevant. One is the greater application of *-n* metathesis in monosyllabic first conjugation verbs such as *dar* 'give', yielding *de-me-n*, *de-le-n*. This tendency may find motivation in increasing the weight of the final syllable. Indeed, metathesis would satisfy well-formedness across multiple domains given that a cluster-final clitic that benefits from plural displacement to its right not only becomes morphotactically nonfinal in its domain but also gains a syllable coda in the phonology as a result, thereby adding to its syllable weight.

This points toward a more general idea: that *-n* metathesis occurs more often specifically for metrical reasons. In fact, Colantoni and Cuervo (2013) investigate the extent to which *-n* metathesis occurs alongside stressed enclisis in Argentinian Spanish, the idea being that the Stress-to-Weight Principle would prefer a heavy syllable, made possible by *-n* metathesis, as the final stressed syllable.

If this analysis is on the right track, it would explain why the imperative marker *-d* in Iberian Spanish never undergoes metathesis, as Maria Luisa Zubizarreta points out (pers. comm.): as a stop consonant, it is nonmoraic, and so would have no syllable weight to contribute toward this putative goal.

Similarly, given the local vs. long-distance hierarchy discussed above, whereby some speakers allow *vénda-me-n-lo* but not *vénda-me-lo-n*, one could clearly appeal to rhythmic factors of heavy and light syllables: *vénda-me-n-lo* forms an alternating HLHL sequence, whereas *vénda-me-lo-n* forms an HLLH trough. Further explorations of this analysis would naturally need to examine the relative rates of application and preferences with a variety of verb-stem types.

8 Conclusion: Properties of a Morphotactic Analysis

We have proposed a set of morphotactic constraints that govern the applicability of the doubling and displacement rules proposed in Harris and Halle 2005. Specifically, we have argued that mesoclisisis occurs in order to satisfy a second-position requirement on the imperative plural suffix *-n* operative within the clitic domain. We have linked restrictions on mesoclisisis to the internal structure of clitics—specifically, with intervention constraints on certain featural values undergoing metathesis with *-n* and in terms of a constraint on metathesis with internally complex (i.e., gender- or number-bearing) clitics. Such restrictions would not be derivable from attempts to reduce mesoclisisis ordering to the ordering of clitics within clusters more generally. We have also capitalized on the role of cyclicity in capturing attested and unattested variants of mesoclisisis with clusters consisting of more than one clitic. The overall ingredients of a morphotactic analysis such as the one proposed here (reflecting the research strategy found in our earlier work on microcomparison between Basque dialects in Arregi and Nevins 2012) are combined to account for interspeaker variation in terms of restricted differences in the morphotactic constraints that speakers posit and fine-grained differences in the inventory of repair operations and their timing, an issue of recent discussion (Arregi and Nevins 2017, Kiparsky 2017, Weisser and Guseva 2018).

More generally, the approach to mesoclisism proposed here is embedded in a theory of grammar according to which crosslinguistic morphosyntactic phenomena are to be accounted for not in terms of a (purely lexical or purely syntactic) monolithic system, but in terms of an explanatory division of labor among separate but interrelated grammatical modules, each with its own principles and operations. In this, we follow a tradition in generative research going back at least to Chomsky's (1970:185) observation that "it is to be expected that enrichment of one component of the grammar will permit simplification in other parts"; indeed, treating the microvariation between doubling and metathesis and its feature-based restrictions and interactions with morphotactics and phonology within a postsyntactic component leads to a much more principled syntax. As Chomsky continues, "The proper balance between various components of the grammar is entirely an empirical issue. . . . There are no general considerations that settle this matter" (p. 185). In the case at hand, we argue that while the bulk of clitic placement in Romance is the purview of syntax, mesoclisism and its special relation with enclisis result from the interaction between the syntactic and morphotactic components.

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