

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

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Abstract: Harris and Halle (2005) present a framework (hereafter, 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. Subsequently, Kayne (2010) has challenged their analysis, arguing that such cases should be treated purely within the syntax. In this paper, we reassess some of Kayne's arguments, agreeing with his conclusion that the most important desiderata of any general analysis of these sorts of 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 condition on the positioning of the plural affix, and develop a set of conditions on these operations that situate the locus of interspeaker variation within the postsyntactic component.

1 Mesoclis in Spanish and Other Languages

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

(1) *Standard form: enclisis*

Síente -n -se!

sit.IMP -PL -CL.REFL

'Sit down! (imperative plural)'

(2) *Alternation between displacement and suffix-doubling:*

a. Síente -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 *mesoclisis* for both *displacement* as in (2a) and *doubling* in (2b). This phenomenon has been the focus of much discussion (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 the example below (Haspelmath 1993:288):

- (3) *Externalization of inflection in compounds*
sister-s-in-law > sister-s-in-law-s > sister-in-law-s

The example in (3) 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 from a range of 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 definiteness and case marking. This combination, Haspelmath shows, displays a three-way alternation, between its original etymological sequence *ra-s-me*, and 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 towards 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 notes that historically, one might re-examine 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 is eager to point out that “Language change must be gradual, otherwise innovating speakers would not be understood by conservative speakers” (p. 302). Thus, as part of the transition from *siente-n-se* to *siente-se-n*, “speakers have no choice but to create hybrid forms” like *siente-n-se-n*, 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). In this same article, however, Haspelmath leaves open: “How do speakers get rid of the residual, nonfunctional internal inflection? [. . .] Some details of the final cleaning up remain to be accounted for” (p. 303). In the present article, therefore, we seek a mechanistic 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 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 the discussion in (9) makes clear, we view displacement and doubling as morphological phenomena, and specifically post-syntactic morphological phenomena, motivated by morphotactic constraints such as (5) and others that we will develop along the course of this paper. Not all models of this phenomenon treat it as morphological; in particular, Kayne (2010) and Manzini and Savoia (2011) present a syntactic view of the phenomenon. 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 the Spanish case at hand. Importantly, the mesocclisis phenomena in question occurs not only with the reflexive marker *se*, but with a host of other pronominal clitics in the inventory, such as third singular masculine accusative *lo* and singular dative *le*. A great deal of dialectological and descriptive work has looked at the existence and limits of mesocclisis 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) *siente-n-se* > *siente-n-se-n* > *siente-se-n*

Note, however, that the mesocclisis in question only jumps over, or involves, 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 mesoclis 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, there are a great deal of dialectal (and more likely, idiolectal) differences in the phenomenon, 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 limits and enables the possibilities that a speaker can have, 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 find more recurrent acceptance 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), but 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 in this paper are the following:

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

Harris and Halle 2005 (and related work that preceded it, 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 debates about the existence (and nature) of a post-syntactic component. Following this, 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 the plural agreement has a very different phonotactic form (namely *-ni-*), exhibit the very same alternation between regular enclisis (15) and mesocclisis (16).

(Ed.: Some characters in the next two examples in S. Marzano Arbëresh have been typeset using the tipa package, in order to be able to include IPA symbols: ' , ə and ε.)

- (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 clitics may determine whether it is eligible for mesoclisism or not. Similarly, as the contrast in (15–16) shows, person features can determine whether mesoclisism applies in Italian dialects. While in the main body of this paper we focus 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 mesoclisism more generally.²

The structure of this paper 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 mesoclisism occurs, and section 4 proceeds to include three explananda that govern mesoclisism: the person and case hierarchies, the plural number constraint, and the two-clitic hierarchy. Section 5 discusses Kayne’s syntactic analysis of mesoclisism (and how it fares with respect to these three explananda). In section 6, we present a revised morphotactic analysis based on Harris and Halle’s (2005) original proposal, with new constraints to address the explananda of section 4, and integrate our account of mesoclisism 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 with open avenues for future research.

2 The Halle-Harris Formalism and Its Properties

The formalism developed in Harris and Halle 2005, which we called *Generalized Reduplication* 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 what are known as 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* (Marantz 1982:439)
nute-nut ‘earth, absolutive singular’
b. *Plural reduplication in Madurese* (Marantz 1982:451)
wáq-búwáq-án ‘fruits’

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 Generalized Reduplication (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
- c. Delete the material before < in the first copy:
[A < B] → ABAB → 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 rightwards position, while [*A* < *B*] will teleologically “move” *B* to a leftwards position (e.g. *nut* moves to the right in Chuckchee, 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 (*BA*):

(19) *Metathesis in the GR formalism*

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

The special property of this formalism, therefore, is that it very closely links partial reduplication (henceforth doubling) and metathesis, which in fact differ only in a single angled bracket, as represented in the following statement of the Spanish mesoclisys rule, which we shall refer to simply as *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 mesoclisys in (7, 8)*

- a. siente [n > < se] = siente se n
- b. siente [n > se] = siente 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 and Pescarini 2014, and Smith 2014). It is in fact interesting to note that while in phonology, metathesis and reduplication are virtually never linked, in morphosyntax we find numerous phenomena of this type (e.g. the many cases of hybrid forms documented in Haspelmath's paper). While closely related in spirit to Embick and Noyer's (2001) operation of Local Dislocation, the advantage of the GR formalism is that it ties together displacement/metathesis with doubling. Importantly, the GR formalism as shown above applies after Vocabulary Insertion (VI), 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, there can be different allomorphs in both sites, thereby demonstrating that the metathetic operation applies *before* Vocabulary Insertion in this case.

While Halle & Harris do not comment on the morphotactic motivations for the mesoclysis 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 prediction of the GR formalism is 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 a number of cases, such as Lithuanian *si* mesoclysis, which shows doubling in addition (Nevis and Joseph 1992), movement of the English comparative morpheme *-er/-est* (which show doubling as in *more better*, *most unkindest cut*), and potentially a number of other cases as well. However, the extension of the phenomenon in (21) to Spanish clitics that seem to have no derivational character, but nonetheless 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 mesoclisism are a number of facts concerning the exponence of pronominal clitics and agreement in Spanish. More specifically, both plural agreement *-n* and several instances of the clitic *se* involved in mesoclisism 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 towards understanding the nature of the restrictions on mesoclisism discussed in the next section. This section provides an analysis of the postsyntactic exponence of clitic and agreement morphemes in non-Iberian Spanish,⁶ focussing on the details relevant to mesoclisism. 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 the appendices.

The analysis of these facts offered here is postsyntactic. It is, however, conceivable that syntactic accounts of the second-third syncretism and the polymorphemic character of some clitics described here would be compatible with our postsyntactic account of mesoclisism 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, but to provide an explicit account that can provide a solid basis for our postsyntactic analysis of mesoclisism (though see Appendix B for discussion of a potential syntactic account of the second-third syncretism mentioned above).

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 plural dative *le-s*), others are not (third singular dative *le*). Within the framework of Distributed

Morphology (DM) adopted here (Halle and Marantz 1993), we assume that both clitics and agreement are syntactically specified for all these features (except case, reflexivity and gender, which are not syntactically relevant for agreement), and that the different syncretisms in the paradigms are due to the standard operation of underspecification in vocabulary entries (and the Elsewhere Principle) and impoverishment rules. The focus of this section is syncretism due to the latter, though 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 of them surface as polymorphemic, due to the effect of postsyntactic fission, discussed at the end of this section.⁸

The syncretisms that are most directly relevant to mesoclysis are the following:

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

- a. First and second person clitics are syncretic for reflexivity, case, and gender.
- b. All second plural forms are identical with third 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 the generalizations above make the interaction between these neutralizations nontrivial. In particular, second 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 make second plural reflexives 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]

Clitics and agreement morphemes are distinguished by their category features, D vs. Agr, respectively. In addition, clitics are specified as [-strong], which distinguishes them from their strong pronominal counterparts, 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 paper, we shall 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 (where recall, SD abbreviates structural description, and SC abbreviates structural change):¹⁰

(26) *Participant Impoverishment*

- a. SD: [D, -strong, +participant, \pm author, \pm anaphoric, \pm peripheral, \pm feminine]
- b. SC: delete [\pm anaphoric, \pm peripheral, \pm feminine]

Second person plural clitics and agreement are syncretic with the third person (22b) because of 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 plural is exponed in the same way as third plural. As shown in table 1, these impoverished second person morphemes behave as 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 only available 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 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 mesoclisism in Spanish second plural imperatives below (sections 4 and 6); in particular, second plural clitics and agreement (i.e. *-n*) are treated as nonparticipant (third person) by mesoclisism, a consequence of the independently motivated rule of 2Pl Impoverishment.

Also relevant to mesoclisism is the fact that, although third person clitic forms make distinctions in reflexivity, case, number, and gender, they do feature 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* (i.a. Bonet 1991, Halle and Marantz 1994, Bonet 1995, 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* in the literature (Perlmutter 1971). As illustrated in the following examples, when not clustered with another clitic, the form of nonreflexive third person dative clitics (singular *le*, plural *les*) is distinct from 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 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, Halle and Marantz 1994, Bonet 1995, and Nevins 2007:

(33) *Spurious se Impoverishment*

- a. SD: Cl_1 specified as [D, -strong, +peripheral, -participant, -author, \pm singular] and Cl_2 specified as [D, -strong, -peripheral, -participant, -author]
- b. SC: delete [-participant, -author, \pm singular] in Cl_1

In a way similar to third person reflexives (whether in clusters or not), this impoverishment results in the realization of all dative clitics with the default exponent *se* when clustered with accusative clitics.

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

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

- 2Pl 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, are an important ingredient of our account of constraints on mesoclis and variation thereof, as described in the following section.

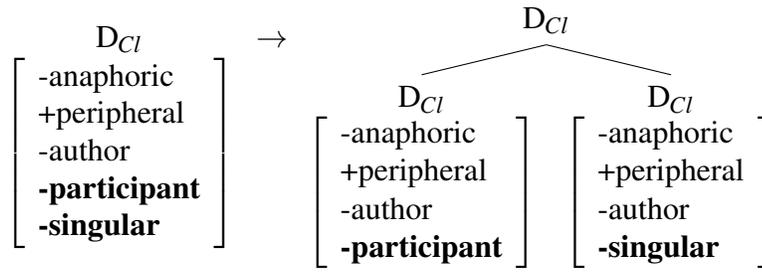
Finally, as is evident in table 1, all plural clitics contrast with their singular counterparts and with number-neutral clitics (e.g. reflexive *se*), in that they are polymorphemic, that is, their [-singular] feature is realized by means of a separate plural exponent *-s*. Similarly, accusative third person and second plural clitics not otherwise affected by Reflexive Impoverishment are the only ones that maintain gender features after impoverishment, and these gender features are exponed by separate gender-specific exponents (masculine *-o* and feminine *-a*). We propose that 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. * $[\pm \text{ participant}, \pm \text{ feminine}]$ (no joint exponence of person and gender)
- b. * $[\pm \text{ participant}, -\text{singular}]$ (no joint exponence of person and plural)
- c. * $[\pm \text{ feminine}, -\text{singular}]$ (no joint exponence of gender and plural)

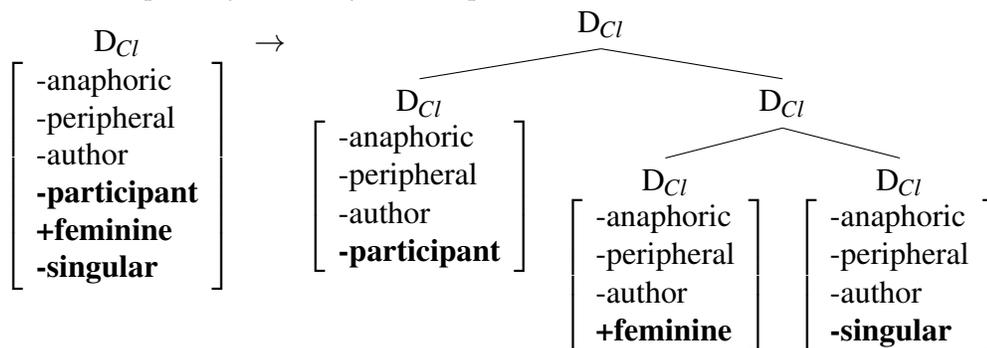
These constraints ensure mutual separate exponence of person, gender, and plural number, by triggering fission of morphemes in which they cooccur into separate nodes. For instance, like other plural clitics lacking gender, nonreflexive dative plural *le-s* undergoes fission splitting [-participant] and [-singular], triggered by constraint (35a) (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 here in the feminine:¹⁴

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



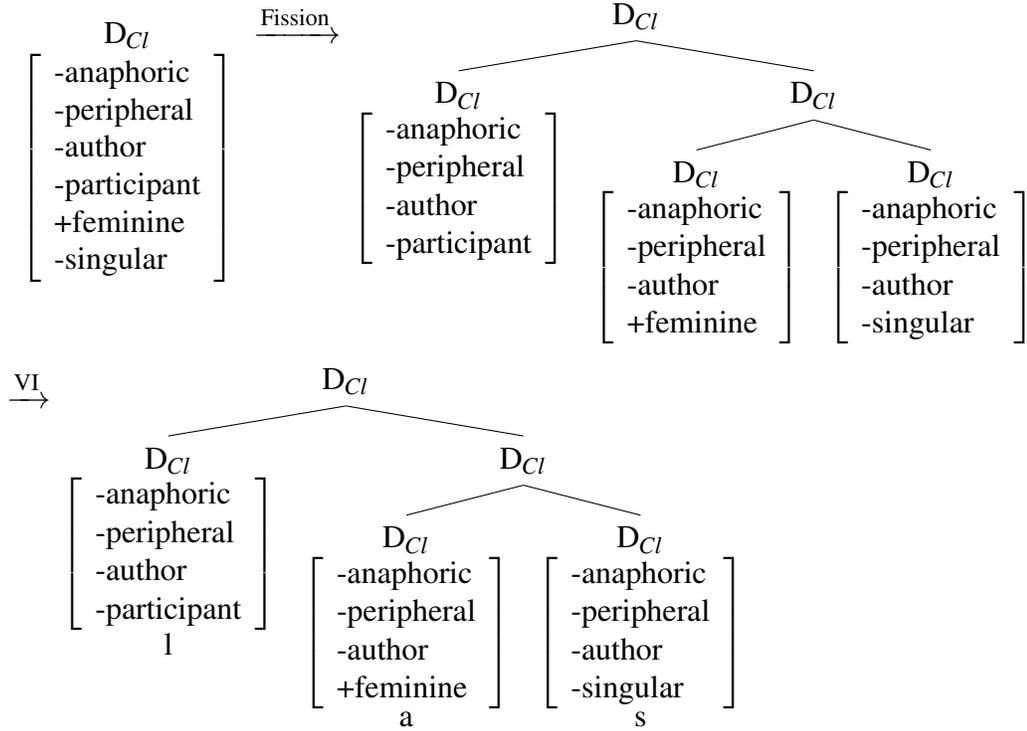
As is evident in the examples above, we follow Arregi and Nevins (2012:132–136) in assuming that copies of all features not affected by the triggering constraint are present in each of the morphemes in the outputs of fission. In particular, the categorial D feature present in the input, as well as others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

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 the Appendix):

(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)*). Mesoclysis 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 also derives featural properties of certain morphemes that are taken into account by mesoclysis triggered by plural agreement *-n* in imperatives. As part of the more general neutralization between second and third plural, second plural agreement *-n* is *third* person plural at the point of the derivation in which its displacement/doubling applies. 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 mesoclysis, to which we now turn.

4 Three Crucial Explananda in Spanish Mesoclysis

The literature describes several restrictions on mesoclysis in Spanish. In this section, we concentrate on three such restrictions, which are analyzed in later sections in the article. We begin with constraints involved in some of the variation found in the phenomenon: while some dialects allow mesoclysis only with nonthird person clitics, others also allow it with third person, and furthermore, some make a further cut between dative and accusative among third persons. The second restriction applies to all dialects, and bans mesoclysis of plural clitics. Finally, we discuss a restriction on mesoclysis 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 Kany 1951:112–114 and Rosenblat 1946:229–232, not all clitics pattern equally in terms of their ability to undergo mesocclisis. In what follows, we concentrate more on the morphosyntactic generalizations themselves, rather than 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, in which the symbol “%” indicates that the mesoclititic 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!
sit.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 singular *me* is not, and neither is *se*: in any of its uses, it's subject to either Reflexive or Spurious *se* Impoverishment (see section 3), which delete its person features (among others). Thus, nonthird person clitics outrank third person clitics in the hierarchy of accessibility to mesoclis:is:

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

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

In addition to the most basic cut made above in terms of nonthird person versus third person, there is an additional hierarchy within the third person clitics, related to case. In particular, it seems that some speakers only allow mesoclis:is with reflexive *se*, and, among third person clitics, some speakers can mesocliticize 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. We return to our implementation in structural terms in subsection 6.5. For such speakers, a more articulated hierarchy would be characterized as:

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

While this hierarchy is not one that cuts across persons, it is one that cuts *within* persons, specifically the dative vs accusative, as the latter show additional complexity in bearing a

gender distinction.

Two further observations on these hierarchies are in order before we turn to other restrictions on mesocclisis. First, the person hierarchy does not include second singular *te*. The reason is simple: the imperative forms with mesocclisis have a second plural subject, but second singular clitics are universally banned from cooccurring with second plural subjects (a ban which we assume is due to Condition B of Binding Theory). This restriction applies independently of mesocclisis, and can be seen 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 plural colloquial *os*, described in Appendix A. Two properties of Spanish grammar conspire to make it impossible to test its mesoclitic properties. 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, this 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 plural colloquial counterpart of *-n* in imperatives, *-d*, does not participate in mesocclisis, 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 mesoclitis 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 plural *nos*, third person dative *les*, and third person accusative *los*, *las*) uniformly do not undergo mesoclitis: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 -PL 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)'

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

Harris and Halle 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.

(Ed.: The following paragraph (line 4) contains the IPA symbol β , typeset with the tipa package.)

First, no known phonotactic repair can 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 help 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!
 serve.IMP -PL -CL.1PL.DAT -CL.3SG.M.ACC
 ‘Serve us it! (imperative plural)’
 b. **Vénda* -(n) -nos -lo -n!
 serve.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 also that the Italian and Albanian dialects have *-ni* and other nonsigmatic plural agreement exponents which 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, mesocclisis 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 below, repeated verbatim from the source, indicates this judgement):

(Ed.: Some characters in the next two examples in S. Marzano Arbëresh have been typeset using the tipa package, in order to be able to include IPA symbols: ʃ, ' , ə, ŋ, ə and ε.)

(51) {siʃʃə / '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) ?'lɛ nnə ni
leave CL.1PL.ACC 2PL
'Leave us! (imperative plural)' S. Marzano Arbëresh (Manzini and Savoia 2007:235)

(53) {siʃʃə / 'ŋgrig} (n)ni {ɛ / 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 singular (51) but not first 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 continuing, it is important to note that the ban on plural mesoclisism 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, due to prior application of Reflexive Impoverishment, which accounts for the fact that *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. On the one hand, 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 subsection 6.3, therefore, is 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, and not a restriction specifically applying to clusters. The generalization could be confirmed by speakers who do allow mesocclisis 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 mesocclisis 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 field work is needed in this particular area.¹⁷

5 Kayne's 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 account for displacement (and doubling) entirely with syntactic structures and mechanisms. The outset of Kayne's paper involves a number of criticisms of overgeneration of Harris and Halle 2005, arguing that that it could potentially metathesize any segment, or any morpheme. As we will make clear in section 6 below, our morphotactic formalization of mesocclisis as specifically triggered by a Noninitiality condition 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 mesocclisis is in place, this particular set of 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 has against a postsyntactic analysis. The first is 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 upwards, and involves the derivational requirements of either the mover or target in creating a new hierarchical relation, while morphological displacement (and doubling) we argue is due to the language-specific requirements on the relative precedence of elements in linear order. The second type of argument is 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 more strange within the syntax than they do in the morphology.

In order to further develop this latter point, let us turn to the basic outline of Kayne's analysis, which begins by analogizing mesoclefts with multiple agreement, of the kind where more than one verbal element shows evidence of agreement with the same DP, as in the following example (see also Alcázar and Saltarelli 2010 for a defense of this view):

- (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 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 subsection 4.1, parallels 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 Kayne

- (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. 164; fn. 38). 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 undergo climbing. As such, the potential appeal to mesoclitisis as parallel to clitic climbing is weakened – as arguably the latter is more directly syntactic.

Of perhaps more immediate concern is the relationship between displacement and doubling with Kayne's approach. Displacement results from movement of the clitic(s) to above Agr, whereas doubling involves two Agr projections. According to Kayne (p. 158), "each *-n* is merged as an independent morpheme in the ordinary syntax". The relevant steps, as culled from Kayne's paper, are listed below for the derivation of cases such as *vénda-n-lo-n*:

- (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*.

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 an x number of clitics (e.g. no dialect has **vénda-n-me-n-lo-n-n*). Similarly, every instance of *-n* has to be right-adjacent to the verb or to a clitic, so no **vénda-n-me-lo-n-n*. Readers tempted to dismiss such cases as ruled out by phonology need only consider their would-be S. Marzano counterparts with *-ni*, equally unattested to our knowledge. 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 mesoclisys as detailed above, 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 and insight into the patterns of attested and unattested interspeaker variation. It is to this task we now turn, formulated within the postsyntax, 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 Mesoclisys

We agree with Kayne that Harris and Halle's (2005) GR as such is just a mechanism that does not account for the restrictions described above. However, we argue that, supplemented with morphotactic constraints, a postsyntactic analysis based on GR can provide an insightful analysis of all the relevant facts of mesoclisys. Our proposal of what derives mesoclisys is the following:¹⁸

(65) *Mesoclisys 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.

While Haspelmath's proposal in terms of a Derivation Inside Inflection condition (section 1 above) may have been the original source of mesoclisys, we propose that (65) is what is

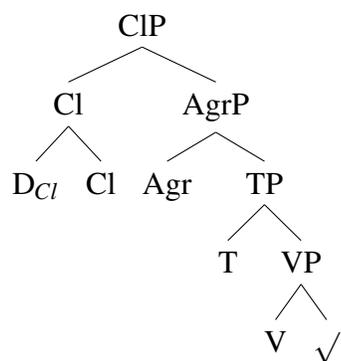
synchronically active, and more accurate than Derivation Inside Inflection, since mesocclisis affects clitics such as first plural *me*, which are clearly not derivational.

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 account for the restrictions on mesocclisis in terms of morphotactic constraints on mesocclisis. Subsection 6.1 formalizes our approach to the syntax of clitic clustering, independently of mesocclisis. Subsection 6.2 implements (65) in terms of a Noninitiality constraint that triggers mesocclisis, and demonstrates how displacement and doubling are repairs to the constraint. Subsections 6.3–6.5 provide restrictions on mesocclisis 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 clause 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

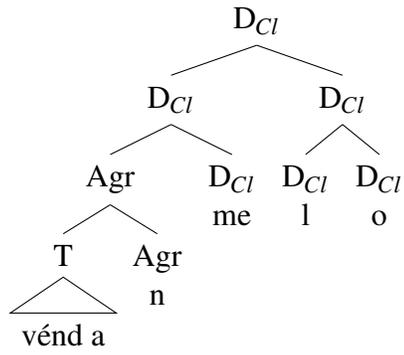
(66) *The syntax of Romance clitics*



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 the clitic-hosting head (i.a. 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, from which 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 following structure:²¹

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, and thus a form with multiple cliticization has the following structure (Terzi 1999:99–108):²²

- (68) 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:

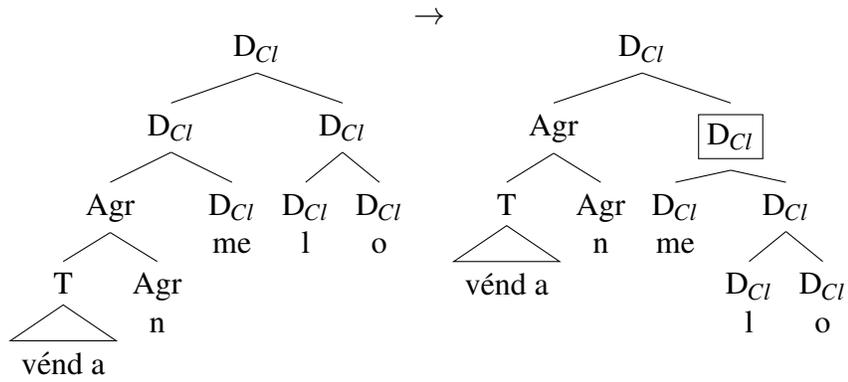
(69) *Clitic Clustering*

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

The condition above 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). The specific statement about c-command above is so that in a complex clitic node (such as the one constituting *l-o*), only 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 applies potentially multiple times successively, starting with the two innermost (i.e. most deeply embedded) clitics.²³

Examples with a single clitic do not meet the structural description of the rule, which does apply in cases of multiple clitics:

(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 shall 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, in which 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:

(Ed.: The following example contains the IPA symbol ð , typeset with the tipa package.)

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

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

(Ed.: The following example contains the IPA symbols β and ð , typeset with the tipa package.)

- (73) Se va de copas.
 CL.REFL goes of glasses
 ‘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 the 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 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 in which 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, the clitic cluster (even in cases with a single clitic) has its own (secondary) stress for many speakers (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 mesocclisis 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}).

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, 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 mesocclisis whenever it is violated. In particular, it triggers the GR rule, which we reformulate as follows:²⁶

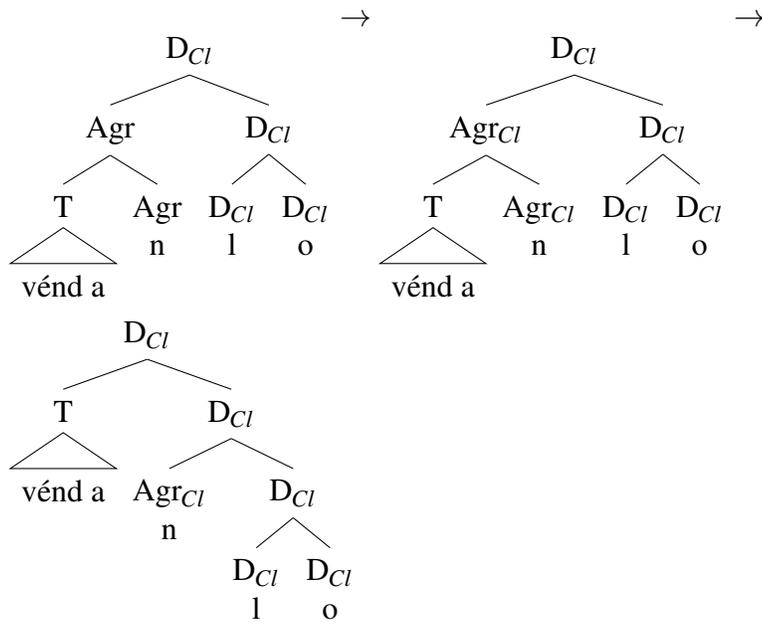
(79) *GR rule*

- 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 subsection, we illustrate the combined effect of *n*-Extradition, Clitic Clustering, Noninitiality, and the GR rule in deriving mesocclisis in both simple and complex clitic clusters.

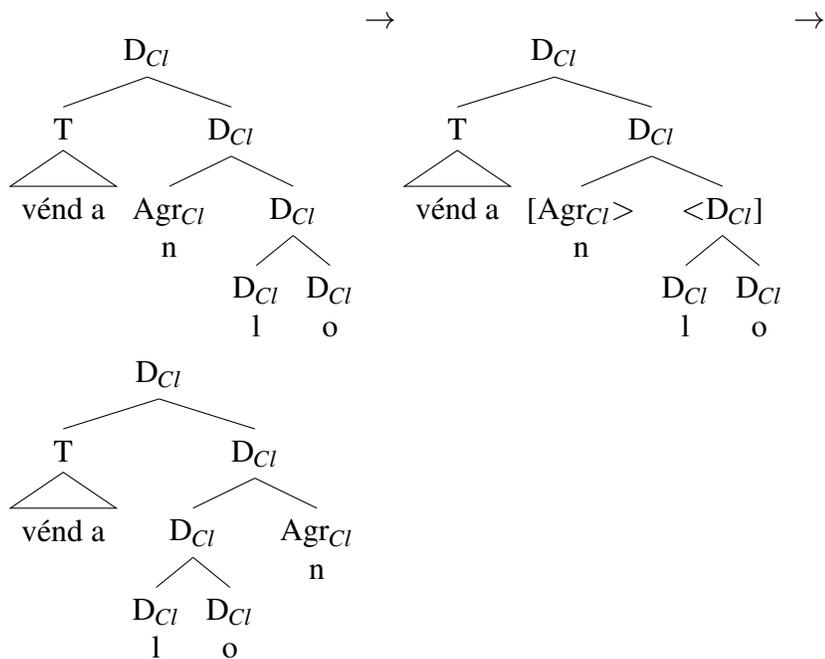
Consider first clusters with a single pronominal clitic such as (67). If *n*-Extradition (77) does not apply, the syntactic structure derived in (67) is not altered postsyntactically, and the result is enclisis (*vénda-n-lo*). If *n*-Extradition does apply, clitic *-n* is clustered with *lo*:

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

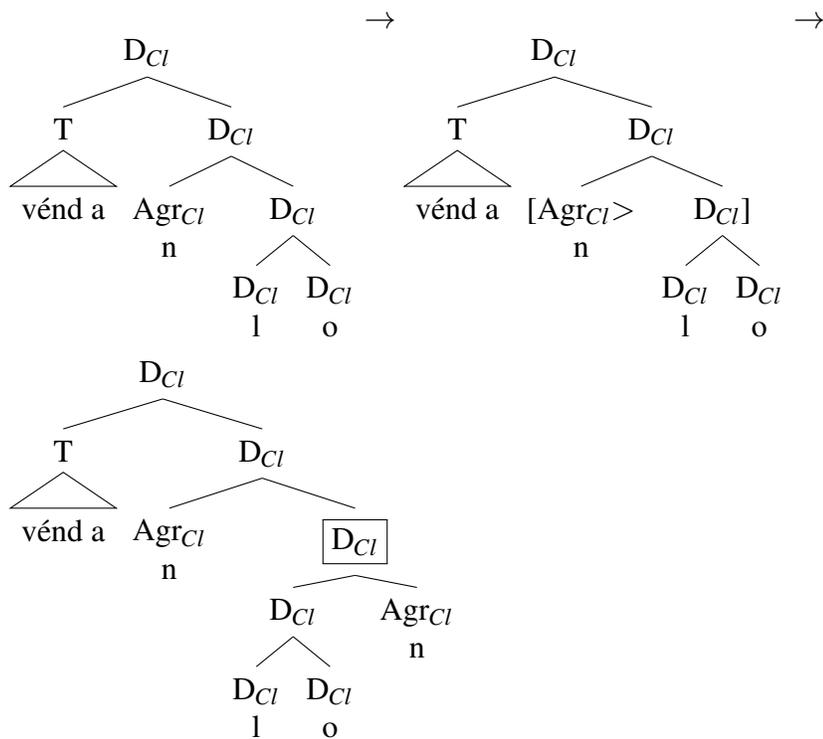


The output, however, violates Noninitiality (78),²⁷ which is repaired with either displacement or doubling by applying the GR rule (79):²⁸

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



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



Thus, the optionality of mesoclysis 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, reference to “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*. Furthermore, 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

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. *Mesoclysis with no in-situ -n*
vénda-me-n-lo, vénda-me-lo-n, vénda-me-n-lo-n.
 - c. *Mesoclysis 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 has to address is the following. If mesocclisis 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 mesocclisis 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. We can think of this form as derived by displacement from mesoclitic *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 mesoclitic variants can be derived by cyclic iterations of displacement and/or doubling:³⁰

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

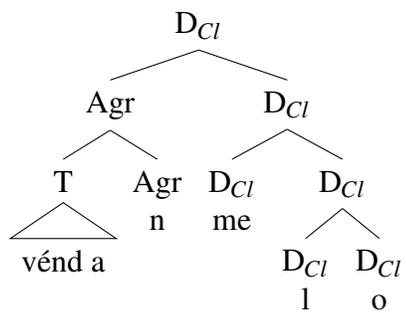
a.	Displacement	<i>vénda-me-n-lo</i>
b.	Displacement, displacement	<i>vénda-me-lo-n</i>

- | | | |
|------|--------------------------------------|--------------------------|
| c. | Displacement, doubling | <i>vénda-me-n-lo-n</i> |
| (86) | <i>Mesoclisys with no in-situ -n</i> | |
| a. | Doubling | <i>vénda-n-me-n-lo</i> |
| b. | Doubling, displacement | <i>vénda-n-me-lo-n</i> |
| c. | Doubling, doubling | <i>vénda-n-me-n-lo-n</i> |

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

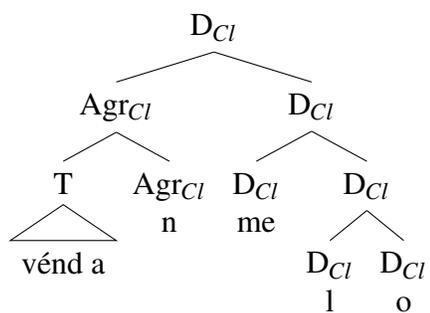
If the optional rule of *n*-Extradition does not apply, the result is enclisis (83a). As a result, *-n* does not participate in Clitic Clustering, and Noninitiality is not violated. The resulting structure for *vénda-n-me-lo* is shown in (68), repeated here:

(87) *Enclisis in clitic clusters*



If, on the other hand, *n*-Extradition does apply, the result is a structure in which *-n* is a clitic:

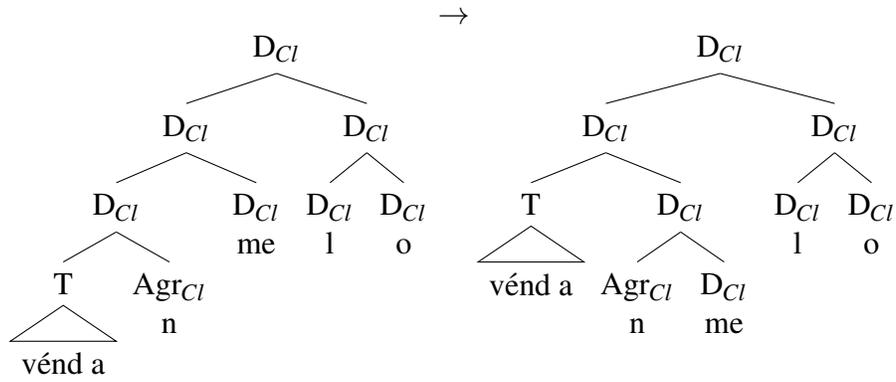
(88) *n-Extradition in clitic clusters*



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 mesoclis. However, the more complex structure of these clitic clusters yields more derivational options, which derive the six attested mesoclitic variants in (85–86), as we show below.

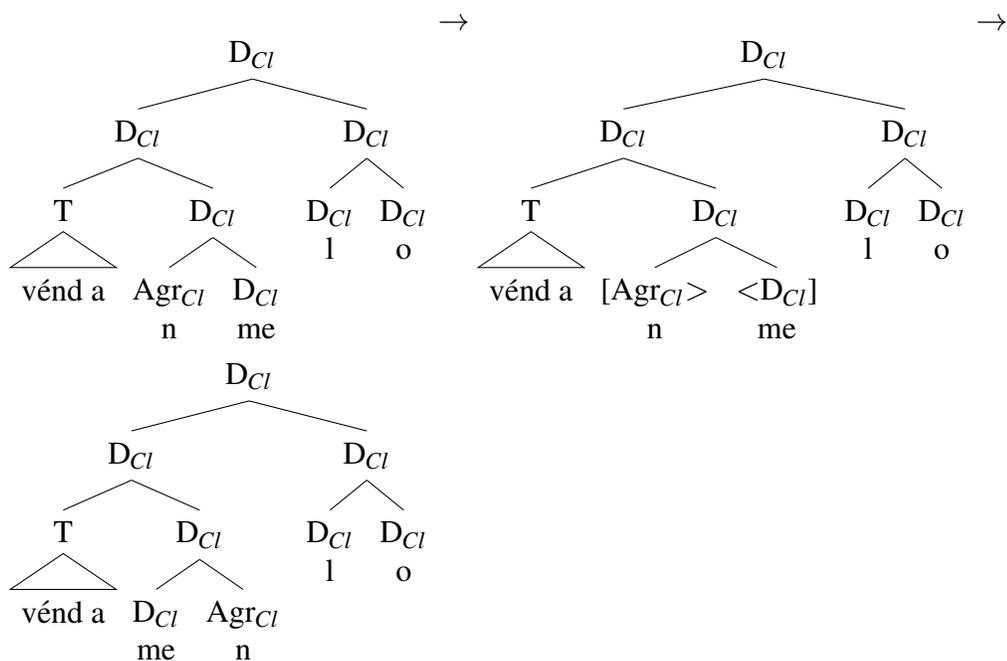
The first step after *n*-Extradition (88) is cyclic application of Clitic Clustering to the two lowest clitics, namely *-n* and *me*:

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

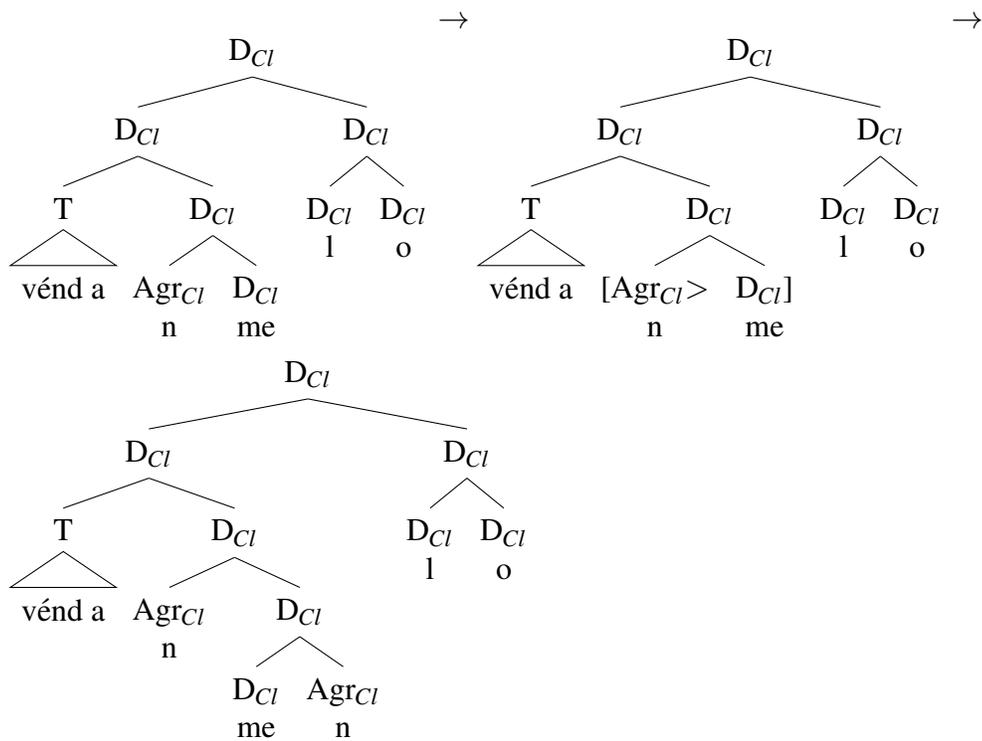


The output violates Noninitiality. The repair can be either displacement, deriving forms with no in-situ *-n* (the cases in (85)), or doubling, resulting in forms with in-situ *-n* (the cases in 86):

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



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



Application of displacement or doubling (or neither) after subsequent applications of clustering derives the six different forms in (85–86), as shown below.

The next step involves clustering of the top clitic *l-o*. At this point, the structural description of Clitic Clustering, repeated below from (69), is met in two different ways by the structures above:

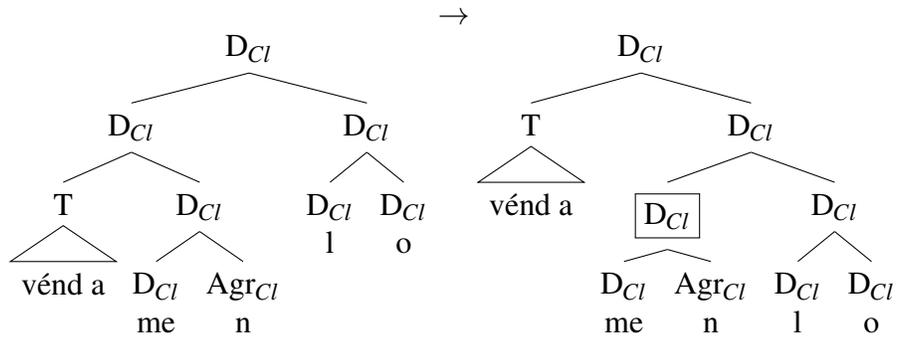
(92) *Clitic Clustering*

A node specified as [-strong] (a clitic) is rebracketed to form a constituent with a node specified as [-strong] that it c-commands and 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 shall refer to as *high attachment* and *low attachment*.³¹ As we show below, this optionality results in optional application of displacement/doubling of *-n* with respect to *l-o*.

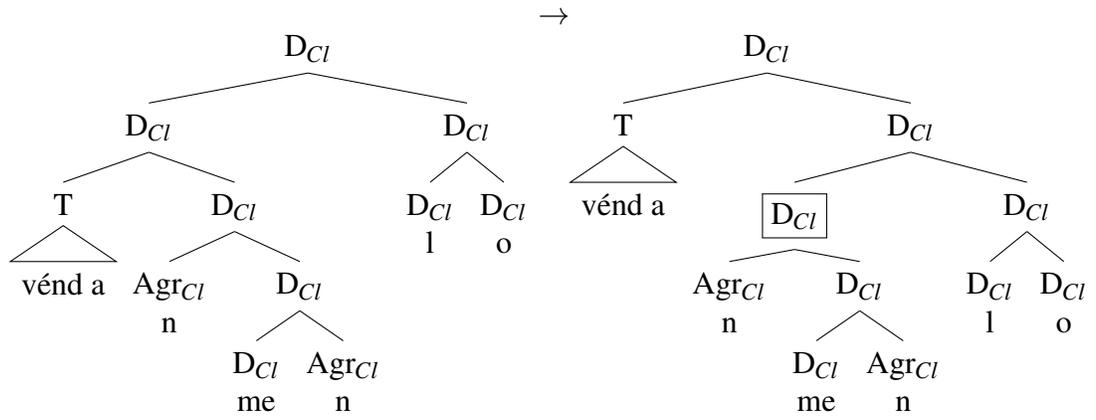
Under high attachment, the output does not violate Noninitiality, and no further displacement or doubling apply. We illustrate this first for the case in which high attachment is fed by initial displacement:

(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_{CI} 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:

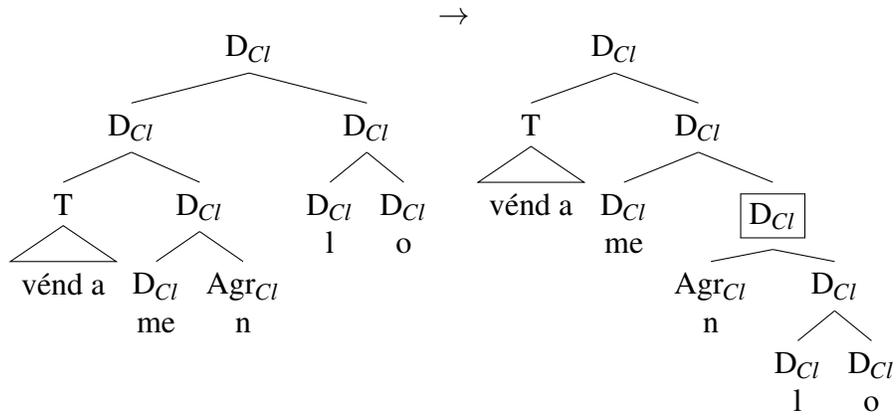
(94) *Output of doubling (91) followed by high attachment: vénda-n-me-n-lo*



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

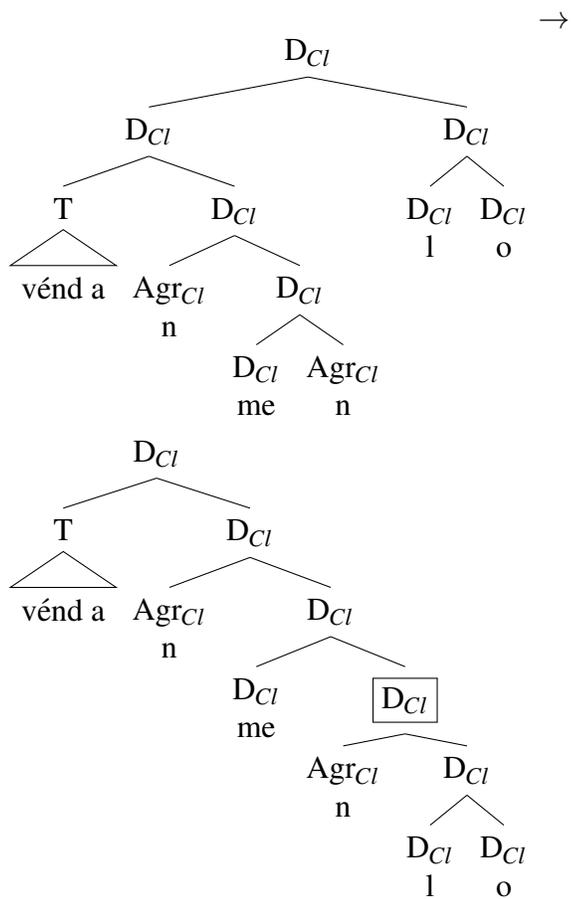
On the other hand, the output of low attachment does violate Noninitiality, which we illustrate first for the case in which low attachment is preceded by displacement:

(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*

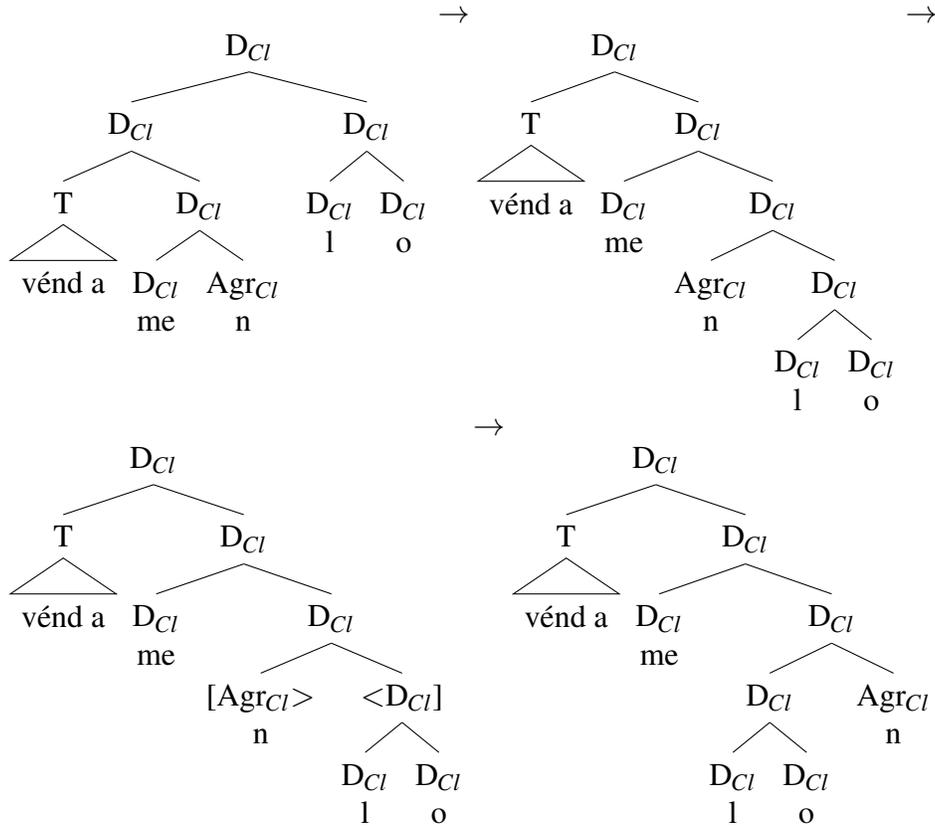


The ensuing displacement or doubling repair is only in apparent violation on the second-position requirement: within the immediate cluster containing *-n*, a copy of it is in second, not higher, position. The derivations for the four variants fitting this description follow.

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

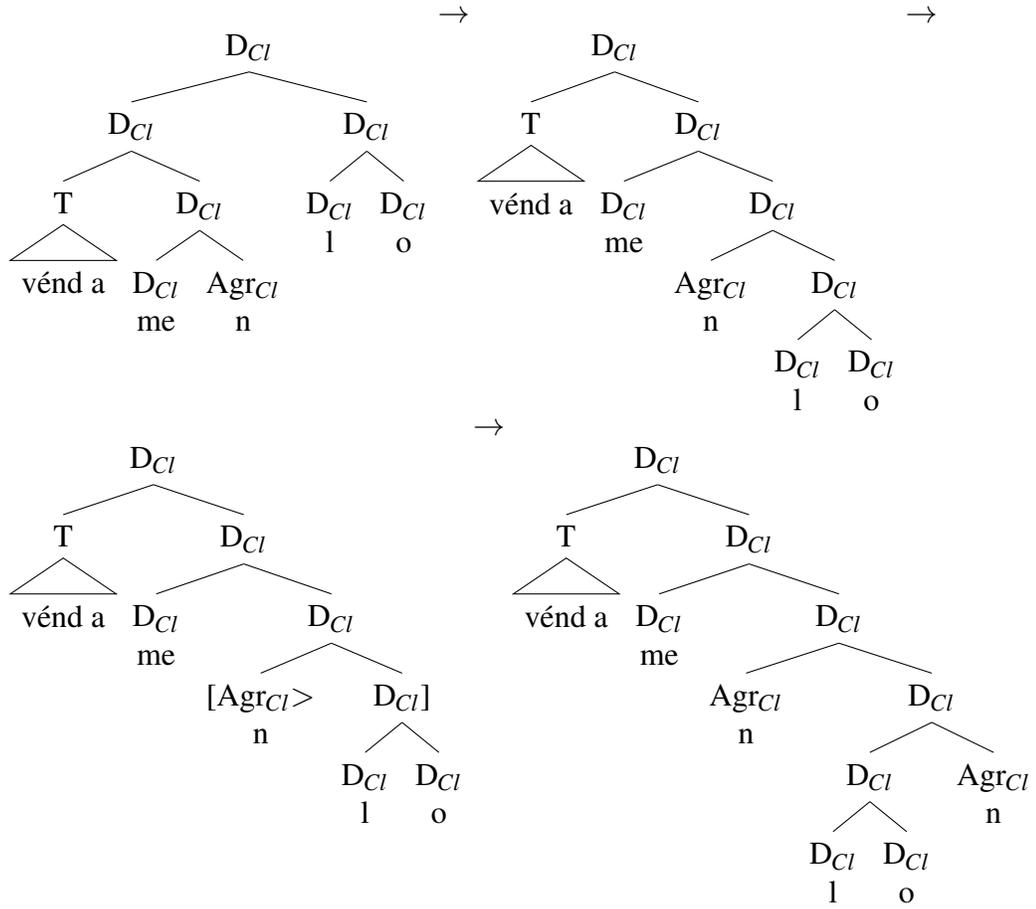
(97) *Output of displacement (90), followed by low attachment (95), followed by displacement repair:*

vénda-me-lo-n



(98) *Output of displacement (90), followed by low attachment (95), followed by doubling repair:*

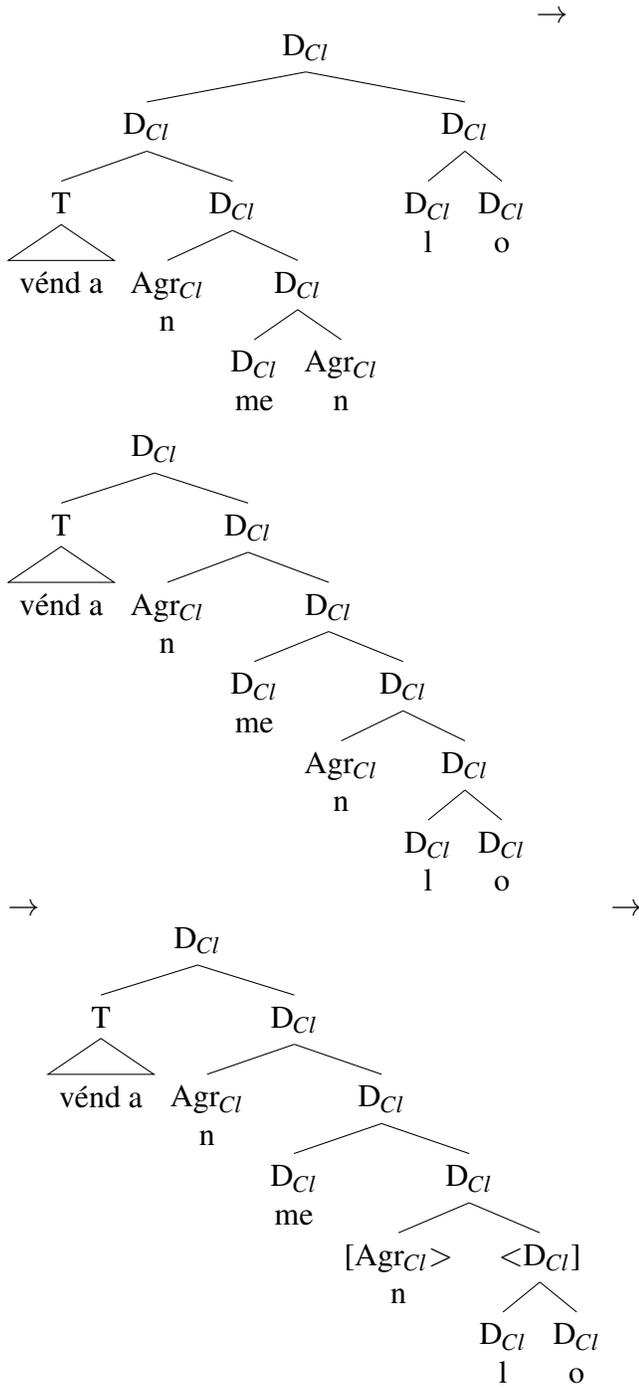
vénda-me-n-lo-n

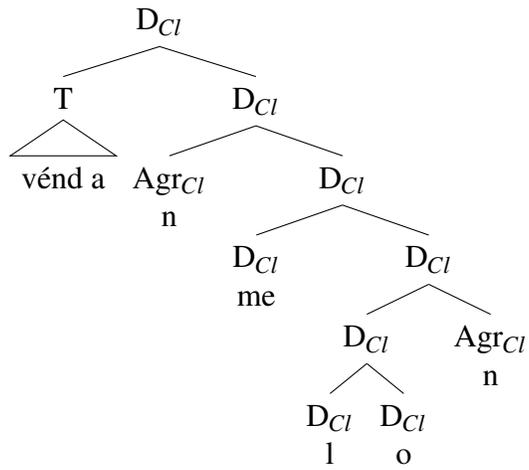


Similarly, the output of low attachment applied to a doubling structure (96) can also be repaired by either displacement or doubling:

(99) *Output of doubling (91), followed by low attachment (96), followed by displacement repair:*

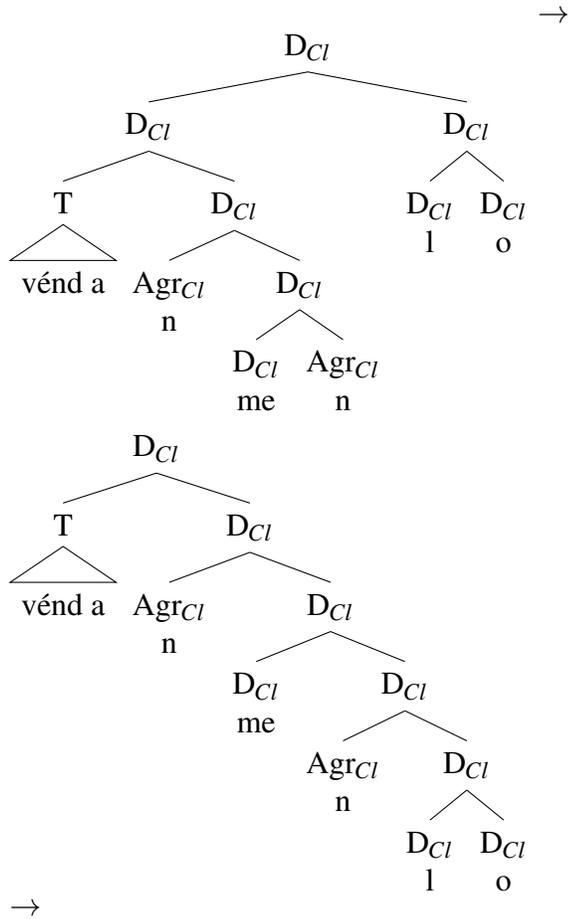
vénda-n-me-lo-n

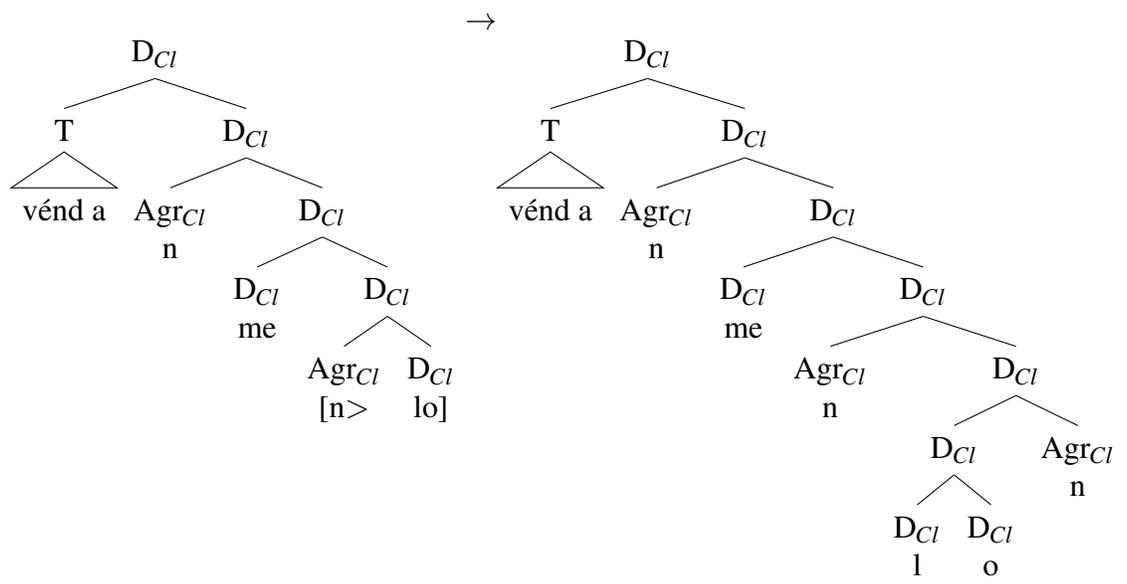




(100) *Output of doubling (91), followed by low attachment (96), followed by doubling repair*

vénda-n-me-n-lo-n





This exhausts all the analytical possibilities allowed, which, as desired, exhausts all the attested forms of mesoclisys 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 road forks. 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. mesoclisys). 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* and 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 have an influence on the course of the derivation.

In the following subsections, 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 subsection 4.3, under which no speaker allows mesoclisys *only* to the second pronominal clitic in a cluster. Given the derivations provided in the previous subsection, a natural explanation emerges. The cyclic character of these derivations is such that *-n* will always be clustered with the closer clitic first, and hence will have an opportunity to repair Noninitiality immediately. Displacement of *-n* to after

the first clitic is thus available in all dialects that initiate *n*-Extradition.

Recall that 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 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.

What prevents, therefore, some speakers from displacement of *-n* all the way to the end of the clitic cluster is simply a restriction to 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 attachment, the question that therefore arises is why no speakers allow only low attachment, the answer to which can be grounded in locality – there is no clear grammatical bias one could appeal to 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 there is never mesoclitis with plural clitics, even for cases in which we might expect that a coda restriction is not at play, such as **vénda-nos-lon*, which would be phonotactically well-formed (see subsection 4.2). Our explanation is cast in terms of an intervention constraint on the GR rule:

(101) No movement of [–singular] across [–singular] 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 condition in (103).

- (102) 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)

(103) *Plural Intervention Condition 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 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 both operations as resulting from applications of the same process within a single module. Of course, the fact that this condition 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, it would lead to a crash.

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) Nonterminal constraint on GRule (dialectal): No movement of a clitic over an internally complex clitic to satisfy Noninitiality on *-n*

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

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

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

The consequences 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) in section 3, is that for *any* plural clitic, no displacement is possible, because any plural clitic in Spanish will necessarily involve a branching D_{Cl} sister node to the erstwhile metathesizing *-n*.

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

6.5 The Person and Case Hierarchies

Another explananda, pointed out in section 4, is the person hierarchy, repeated below:

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

According to this hierarchy, some speakers allow all clitics to participate in mesoclisism, while other speakers allow only nonthird person clitics to do so. Our focus will be 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 is against displacement operations moving it across third person clitics:

(107) No movement of [–participant] across [–participant] to satisfy Nonintegrity 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 condition in (109).

(108) 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 Condition on (108) (dialectal)*
 D_{Cl} is not [–participant].

We leave here, as an open question, the question of why (109) is limited to some speakers, whereas the plural intervention condition (103) is found across all mesoclitis varieties. It may be that as learners observe and generalize from the observed patterns, *-n* is more clearly recoverable as [–singular], whereas its identity as [–participant] is less direct, given the fact that it is syntactically 2nd 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 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 different hierarchy than the one in (106).

We now turn to the case hierarchy, repeated below:

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

How to derive those dialects that allow mesocclisis 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 displacement of 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 condition, repeated from (105):

- (111) *Nonterminal Condition 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 as *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 *lo/la* cannot mesocliticize have the Nonterminal constraint in (111) – which also derives no mesocclisis with plurals. By contrast, in dialects in which

lo/la can in fact mesocliticize, it's the number intervention constraint (103) that prevents plural mesoclysis, but the absence of any nonterminal constraint – whether for complex D subtrees that have undergone number or 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 the preceding three subsections, we have proposed a set of additional morphotactic restrictions on the GR formalism that account for the three explananda outlined in section 4. We 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 phi-featural restrictions, we proposed that the person hierarchy and the number restriction are due to additional morphotactic intervention constraints imposed upon the GR rule, where certain speakers and varieties may vary in whether they include these. Finally, in terms of an additional point of variation, there is another way to derive the number restriction, based on a constraint on the complexity of the metathesizing clitic, and this in turn will rule out mesoclysis of both number-bearing and gender-bearing clitics for the relevant speakers.

7 Open Problems for Further Analysis

The sections above have developed a morphotactic analysis combined with the GR formalism to provide advances in the modeling of mesoclysis. More broadly, we contend that they demonstrate 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 mesoclysis 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 an otherwise unrestricted theory of Agr-generation and movement 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 the need for a redundant laptop), arguably there are other tools at hand that remain better suited for certain labors.

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

7.1 Mesoclitic Orders Versus Other Cluster Orders

In our analysis, mesoclisis 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 analysis, the relation between enclisis and mesoclisis is even more direct, to the point where he specifically emphasizes the parallels between clitic ordering within a cluster as found in proclisis/enclisis. As such, 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 ordering of clitics in enclitic (or proclitic) environments and their relative order with respect to displaced inflection in mesoclisis: if a 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 are possible to handle within our framework, by additional morphotactic constraints imposed on mesoclitic orders, but 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, the relative order of clitics in enclisis and proclisis correlates with their ability to undergo mesoclisis, and thereby 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, the relative order of third person dative clitics and the middle-passive clitic [u] is just that order 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)).

(Ed.: Some characters in the next two examples in S. Prtocannone and S. Marzano Arbëresh have been typeset using the tipa package, in order to be able to include IPA symbols: ʃ, ɲ, ʰ, ʝ, ɔ, and ɣ.)

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

(113) a. siʃʝɔ-ɣ -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 in further work 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 mesoclitis,

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 above 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, there are intriguing cases found in nonstandard Spanish, in which an *-n* follows clitics where the verb is infinitival (114b) or gerundive (115b) (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 shall refer to speakers with these specific type of mesoclitis 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 not hard to find examples in which this is not a possible analysis, as they involve cases of postclitic *-n* in nonfinite clauses with no possible source in a finite verb.

The following are some from Mare, to appear, 6:

- (116) a. Escuchaba el ruido de la gente, de los esferos moviéndose -se
 listen.IPFV.3SG the noise of the people of the pens moving -CL.REFL
 -n ...
 -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
 with reason of turn.INF -CL.REFL -PL the fifty years of that
 viaje ...
 trip
 ‘... because it’s been fifty years since that trip ...’

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 (114–115), the subject of the 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 (114–115) might otherwise lead one to conclude that it does.

The infinitival and gerundive forms have in common with the imperatives that form the main focus of our analysis that all three are enclitic forms in the standard variety (and, in our analysis, at the output of the syntax). Under Kayne’s analysis, one might say that the distribution of a final *-n* across all three is expected; there is simply a high *-n*, to which the entire gerund or infinitive phrase moves. However, this movement is only obligatory 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 solution for why this *-n* only sprouts in the presence of a clitic – given that the infinitival and gerundive morphology “shouldn’t” have the *-n* in the first place.

What we would like to suggest is 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, 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 would mean that the plural feature *is* morphosyntactically present on the infinitive or gerundive, though realized with zero.³⁶ However, this plural feature may 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 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 the realization of this displaced Agr as *-n* in its postclitic form, while its original copy that is right-adjacent to the nonfinite form has a specific realization as zero.

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 its right.³⁷ Specifically, if plural clitics such as first plural *nos* are in fact decomposable 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 for such displacement to occur *prior* to Vocabulary Insertion. This would have the startling result that a plural morpheme originating on a first 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. 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.

7.3 Prosodic Factors Conditioning Optionality and Variability

As emphasized from the outset, mesoclisism 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. In the present subsection we outline a few of them that appear relevant. One of them is the greater application of *-n* metathesis in monosyllabic first conjugation verbs such as *dar*, yielding *de-me-n*, *de-le-n*. This may be in order to increase the syllable weight of the final syllable. Indeed, such an analysis would be strengthened across multiple domains of well-formedness 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 towards a more general idea, that *-n* metathesis occurs more often specifically for metrical reasons. In fact, Colantoni and Cuervo (2014) investigate the extent to which *-n* metathesis occurs alongside stressed enclisis in Argentinian Spanish, with the idea being that the Stress-to-Weight Principle would prefer a heavy syllable, made possible by *-n* metathesis, on 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 towards this putative goal.

Similarly, given the local versus 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 the latter 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 mesocclisis 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 mesocclisis 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 mesocclisis 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 mesocclisis with clusters consisting of more than one clitic. The overall ingredients of a morphotactic analysis such as the one proposed herein (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 sets of morphotactic constraints that speakers posit and fine-grained differences in the inventory of repair operations and their timing, an issue of recent discussion (Weisser and Guseva 2016, Arregi and Nevins 2017, Kiparsky 2017).

More generally, the approach to mesocclisis proposed here is embedded in a theory of grammar according to which the body of crosslinguistic morphosyntactic phenomena are not to be accounted for in terms of a (purely lexical or purely syntactic) monolithic system, but finds instead explanatory force in a 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 (1970:185), who pointed out that “It is to be expected that enrichment of one component of the grammar will permit simplification in other parts”; indeed, the treatment of the microvariation between doubling and metathesis and its feature-based restrictions and interactions with morphotactics and phonology within a postsyntactic component lead to a much more

principled syntax. As Chomsky continues on the same page, “The proper balance between various components of the grammar is entirely an empirical issue,” and “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, mesoclis and its special relation with enclis is the result of the interaction between syntactic and morphotactic components.

Appendix A: The Postsyntax of Clitics and Agreement in Spanish

This appendix provides a more complete account of the postsyntactic derivation of Spanish clitics and verbal agreement than the one offered in the main text, which we hope will help the reader contrast our analysis of mesoclis with others with a similar degree of explicitness. The analysis is more complete in two ways. First, the paradigms to be analyzed are larger, as they include a formal/colloquial distinction in the second person present in all dialects, as well as dialectal variation in the realization of second plural.³⁹ Second, the account offered below includes the vocabulary entries involved in the very last steps of the complete postsyntactic derivation of clitics and agreement prior to phonological processing.

The colloquial-formal contrast observed in second person is shown in table 2 for non-Iberian dialects. In the singular, colloquial forms have exponence specific to second person (e.g. clitic *te*), and formal forms are syncretic with third person, and thus display the same contrasts in reflexivity, case, and gender as third person. Along the same lines, some or all of these contrasts are missing in the same contexts in which third person clitics neutralize these contrasts (e.g. in reflexives). As shown in table 3, the colloquial-formal distinction is preserved in the plural in Iberian dialects: as in the singular, colloquial exponents are specific to the second person, and formal exponents are syncretic with third person. Non-Iberian dialects lack the colloquial-formal distinction in the plural, and as discussed in section 3, second plural forms are always syncretic with third person. Importantly, mesoclis applies in the context of second plural agreement *-n*, that is, in

cases in which second plural is syncretic with third: in both formal and colloquial contexts in non-Iberian (where the distinction is absent in the plural), and only in formal contexts in Iberian (which preserves the distinction in the plural).

Pronominal clitics are featurally distinct from agreement morphemes in terms of category features, which we assume are D for the former and Agr for the latter. The other features relevant for the postsyntactic derivation of these morphemes are the following, copied from section 3 and incorporating the colloquial-formal distinction:

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

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

(122) *Number feature* (Harbour 2003)

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

(123) *Gender feature in clitics*

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

(124) *Formal vs. colloquial*

- a. Formal: [+formal]
- b. Colloquial: [-formal]

(125) *Case features in clitics* (Calabrese 2008)

- a. Accusative: [-peripheral]
- b. Dative: [+peripheral]

(126) *Reflexivity feature in clitics*

- a. Reflexive: [+anaphoric]

- b. Nonreflexive: [-anaphoric]

(127) *Clitic vs. strong pronouns*

- a. Strong: [+strong]
- b. Clitic: [-strong]

The impoverishment rules proposed in section 3 are repeated here, with the addition of Formal Impoverishment (128), discussed immediately below (unless otherwise noted, all rules apply in both Iberian and non-Iberian varieties):

(128) *Formal Impoverishment*

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

(129) *2Pl Impoverishment* (absent in Iberian Spanish)

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

(130) *Participant Impoverishment*

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

(131) *Dative Impoverishment*

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

(132) *Reflexive Impoverishment*

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

- b. SC: delete [-participant, -author, ±peripheral, ±singular, ±feminine]

(133) *Spurious se Impoverishment*

- a. SD: Cl_1 specified as [D, -strong, +peripheral, -participant, -author, ±feminine, ±singular] and Cl_2 specified as [D, -strong, -peripheral, -participant, -author]
- b. SC: delete [-participant, -author, ±feminine, ±singular] in Cl_1

As shown above, 2Pl Impoverishment (129) is absent in Iberian, in which only formal second plural forms are syncretic with third person. This is due to Formal Impoverishment (128), which accounts for the fact that formal second person forms take on third person exponence in all dialects.

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

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

- a. *[\± participant, ± feminine]
- b. *[\± participant, -singular]
- c. *[\± feminine, -singular]

As shown in section 3, these rules are ordered as follows:

(135) *Order of postsyntactic rules (final)*

Formal and 2Pl Impoverishment >
Participant, Dative, Reflexive, and Spurious *se* Impoverishment >
Fission

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

Finally, the following vocabulary entries apply at Vocabulary Insertion:

- (136) *Vocabulary entries for first person clitics*
- a. [D, -strong, +participant, +author, +singular] ↔ me
 - b. [D, -strong, +participant, +author] ↔ no
- (137) *Vocabulary entries for first person agreement*
- a. [Agr, +participant, +author, -singular] ↔ mos
 - b. [Agr, +participant, +author, +singular] ↔ ∅
- (138) *Vocabulary entries for second person clitics*
- a. [D, -strong, +participant, -author, +singular] ↔ te
 - b. [D, -strong, +participant, -author] ↔ o (only in Iberian)
- (139) *Vocabulary entries for second person agreement*
- a. [Agr, +participant, -author, -singular] ↔ is (only in Iberian)
 - b. [Agr, +participant, -author, +singular] ↔ s
- (140) *Vocabulary entries for third person clitics*
- a. [D, -strong, -anaphoric, +peripheral, -participant, -author] ↔ le
 - b. [D, -strong, -anaphoric, -peripheral, -participant, -author] ↔ l
- (141) *Vocabulary entries for third person agreement*
- a. [Agr, -participant, -author, -singular] ↔ n
 - b. [Agr, -participant, -author, +singular] ↔ ∅
- (142) *Default vocabulary entry for clitics*
- [D, -strong] ↔ se
- (143) *Vocabulary entries for gender and number*
- a. [+feminine] ↔ a
 - b. [-feminine] ↔ o
 - c. [-singular] ↔ s

Appendix B: Strong Pronouns and Variable Impoverishment in Andalusian Spanish

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

As summarized in tables 2–3, in formal contexts, as well as in the plural in all dialects except Iberian, second person clitics and agreement morphemes are systematically syncretic with third person, a fact accounted for above in terms of postsyntactic Formal Impoverishment and 2Pl Impoverishment. This neutralization does not extend to strong pronouns: second person *usted* (formal singular) and *ustedes* (plural, restricted to formal contexts in Iberian) are *not* syncretic with third person (cf. singular masculine *él*, feminine *ella*, and plurals *ellos*, *ellas*). We analyze *usted* and *ustedes* as being default exponents of second person strong pronouns, in competition with the colloquial-specific singular *tú/ti* (nominative and oblique, respectively) and plural *vosotros*. This explains their distribution in Iberian Spanish: *tú*, *ti* and *vosotros* are restricted to colloquial contexts, while *usted(es)* are used in formal contexts. In other dialects, as might be expected, no formal/colloquial distinction is made in the plural, which is always realized as *ustedes*. We analyze this fact as the result of the following impoverishment rule:⁴⁰

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

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

Support for this view of the Spanish second person pronominal and agreement paradigm comes from the behavior of second person in certain oral varieties of Andalusian

Spanish (AS), as described in Jaime Jímenez 2015.⁴¹ As shown in table 4, AS seems to represent a mid-point in the transition between Standard Iberian Spanish and other dialects. As in Standard Iberian Spanish, AS strong pronouns maintain a formal/colloquial contrast in the second plural. However, while *vosotros* is restricted to colloquial uses, *ustedes* can be used both as a formal and a colloquial pronoun – which brings AS closer to non-Iberian dialects, in which *vosotros* is absent and *ustedes* is used in both formal and colloquial contexts. As a result, in colloquial contexts, AS variably uses *vosotros* and *ustedes*. Interestingly, this variability also extends to agreement: as in Standard Iberian Spanish, second plural colloquial agreement can be realized as *-is*, but it can also be third-person-like *-n*, which is restricted to formal contexts in Standard Iberian. As a result, the strong subject pronoun *ustedes* can cooccur with either *-is* or *-n* in colloquial contexts:

(145) *Variable colloquial marking in Andalusian Spanish*

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

Following a formulation proposed by Elena Jaime Jímenez (pers. comm.), we account for the AS facts in terms of variable application of Strong Colloquial Impoverishment (in strong pronouns) and 2PI Impoverishment (in agreement), repeated here:⁴²

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

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

b. SC: delete [-formal]

(147) 2Pl Impoverishment (variable in AS, categorical in non-Iberian)

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

b. SC: [+participant] → [-participant]

In Standard Iberian, neither rule applies, and only (145a) is possible in colloquial contexts. In non-Iberian, both rules apply obligatorily, giving (145c) as the only possibility. In AS, both rules apply optionally, and all the outcomes illustrated in (145) are possible.⁴³

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

An interesting fact about the pronoun *usted(es)* is that it is synchronically derived from the written abbreviation of the archaic expression *vuestra merced* ‘your mercy’ (cf. English *Your Honor*), a *camouflage DP* in Collins and Postal’s (2012) sense: though morphosyntactically third person (as diagnosed by agreement), it contains a participant (second person) possessor pronominal that somehow determines that the entire camouflage DP is used to refer to a participant in the speech event (the hearer). It is thus tempting to analyze its etymological derivative *usted(es)* as also being a camouflage DP, as this would account for the same morphosyntax-reference mismatch it displays. A related possibility would be to claim that *usted(es)* is an *imposter*, that is, a DP such as English *the present authors*, that has the same type of mismatch, even though, unlike a camouflage DP, it doesn’t contain an overt participant pronominal.⁴⁴

This seems like an initially plausible account of the behavior of strong second person pronouns in Spanish, and, if it is on the right track, it might be possible to analyze the

third person-like behavior of their clitic and agreement counterparts as being the consequence of agreement with *usted(es)*, rather than the result of postsyntactic syncretism. As pointed out by an anonymous reviewer, a camouflage or imposter-based analysis might explain why agreement with plural colloquial *ustedes* is variable in Andalusian Spanish, as shown in (145), since related facts about pronominal agreement are an otherwise attested property of camouflage DPs (example from Collins and Postal 2012:73):

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

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

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

Although this might help explain the variability in agreement with colloquial *ustedes* in Andalusian, it cannot account for the absence of this variability with *ustedes* in other contexts (colloquial *ustedes* in non-Iberian and formal *ustedes* in all dialects), in which it always triggers third person agreement. Therefore, if facts such as (145) are taken as evidence for a camouflage or imposter analysis of colloquial *usted(es)* in Andalusian, the absence of this variability in agreement in other uses of this pronoun must count as evidence against such an analysis, at least in these uses of the pronoun.

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

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

According to this analysis, the third-person-like form of the second person reflexive *se* and agreement *-n* in (150a) is due to agreement with the strong pronominal subject *ustedes*, a syntactically third person camouflage DP. However, the same explanation cannot be extended to *se* and *-n* in (150b), in which the subject is the covert *pro* counterpart of *ustedes*. This *pro* is not a camouflage DP, since it does not have the typical structure of these nominals, which always include an overt noun (such as *merced* in Spanish archaic *vuestra merced*).⁴⁵ Note, furthermore, that (given the right context) (150b) can be uttered in the absence of an overt antecedent *ustedes*, and can thus not be accounted for in terms of agreement of *pro*, *se*, and *-n* with some antecedent camouflage DP in previous discourse. In a similar vein, nonreflexive second person clitics need not have any sort of overt antecedent:

- (151) Juan les dio un libro.
Juan CL.2PL.DAT gave a book
'Juan gave you a book (plural).'

An anonymous reviewer raises the question whether in cases such as (150b) and (151) with no apparent antecedent *ustedes* there is such an antecedent, but is covert due to ghosting in the sense of Collins and Postal 2012. The latter authors in fact provide evidence from English that imposters and camouflage DPs cannot be ghosted, and propose a specific constraint against it (Collins and Postal 2012:100-102). Their evidence is based on the fact that only overt imposters and camouflage DPs can antecede third person

pronouns. For instance, while the third person pronoun in *Because Daddy was thirsty, he drank a Coke* can take the first person imposter *Daddy* as antecedent, the subject of *He drank a Coke* cannot be interpreted as the speaker in the absence of an appropriate antecedent. Similarly, in Spanish, the goal argument of (151) cannot be interpreted as a group including the speaker, unless the discourse contains an appropriate imposter antecedent, as in the following example:

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

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

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

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Endnotes

We thank María Luisa Zubizarreta, Liliana Sánchez, María Mare, María Cristina Cuervo, Elena Jaime Jiménez, audiences at 45th Linguistic Symposium on Romance Languages, the VII Encuentro de Gramática Generativa, and colloquia audiences at MIT, the University of Utah, and the University of Geneva for helpful discussion.

¹Unless 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).

²We remain agnostic, however, on whether the mesoclitis found in the future and conditional tenses of European Portuguese, for instance *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 herein.

³Note that 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.

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

⁵Although 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.

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

⁷Table 1a only shows agreement affixes in tenses other than the present indicative and the perfective past (aorist), which have certain TAM-specific allomorphs (e.g. *-o* for first singular in the present indicative, *-ste* for second 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. See, however, Appendix A for more complete paradigms.

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

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

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

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

¹²Second 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.

¹³Although 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 is not extendable 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.

¹⁴Arguably, clitics in other Romance languages are only subject to 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).

¹⁵We 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).

¹⁶On Iberian second plural *os*, see the previous subsection.

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

¹⁸See 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 subsection 7.2 below.

¹⁹The 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 1999, to make the structure more 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 ($\sqrt{\quad}$) and a verbal category-fixing head, which we label with a capital letter following Arregi and Nevins (2014).

²⁰Terzi 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 in T in the latter. This presupposes a structure in which T is higher than Agr (see Terzi 1999:92–99 for details),

the reverse order of the one 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.

²¹The 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.

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

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

²⁴This 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].

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

²⁶Our 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 mesoclitisis 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 this second difference is discussed below.

²⁷Note that Noninitiality is a triggering constraint, and not a blocking constraint. Thus, Clitic Clustering in (80) is not blocked, though it creates an environment that violates

Noninitiality (which in turn triggers displacement or doubling). We assume, following 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.

²⁸Following Arregi and Nevins (2012:322–326), we assume that the hierarchical structure is affected by the application of mesoclitisis operations in 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 a ternary branching structure.

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

- (i) Within a branching clitic node *c*, it is not the case that for all instances of *n, m* such that $n \neq m$, *n* is plural *-n*, and *n, m* are dominated by *c*, *n* precedes *m*.

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

³¹In 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 results in the same outputs as high attachment. As discussed below, only low attachment results in further applications of displacement or doubling.

³²Interestingly, optionality in mesoclitisis could be entirely reduced to the way clitic clustering occurs. In particular, the very first cyclic step of clustering depicted in examples 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 mesocclisis 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 mesocclisis. We have not explored all the consequences of this hypothesis, and leave it as a matter in need of future research.

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

³⁴The original example cited by Mare is found in

<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 from’.

³⁵The full sentence (from

<http://www.diariovasco.com/pg060716/prensa/noticias/AltoUrola/200607/16/DVA-ALU-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 made a mark in their childhood’.

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

³⁷In fact, Minkoff claims that data such as (119b) and the *n*-displacement forms that are the focus of this paper 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. *véndame-lo-n* ‘Sell it to me!’), it cannot be straightforwardly extended to variants in which *-n* is sandwiched between the two clitics (e.g. *véndame-n-lo*), as the second clitic in the sequence is final in the word. A similar criticism applies to Halle and Marantz’s (1994) postsyntactic analysis of mesoclitisis.

³⁸In Appendix A, we analyze *-mos* as an atomic exponent of first plural agreement. Examples such as (119b) are strongly indicative of 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.

³⁹However, we abstract away from allomorphy in verbal agreement morphemes. See footnote 7.

⁴⁰Compare with 2PI Impoverishment above: the latter results in syncretism with third person in clitics and agreement, while Strong Colloquial Impoverishment does not.

⁴¹AS is spoken in Andalusia, in Southern Spain. The features of AS discussed here are restricted to Western and Central varieties of the dialect. They are furthermore highly stigmatized, and the exponence of second person in more formal registers of AS has the properties described for Iberian Spanish above. We’d like to thank Elena Jaime Jiménez, Antonio Reyes, and Mercedes Tubino for discussion of the AS data.

⁴²On the notion of variable impoverishment in DM, see Nevins and Parrott 2010 and Oltra-Massuet 2014.

⁴³Although both rules are variable in AS, there seems to be a dependency between the application of the two. According to Jaime Jiménez (2015), while *ustedes* is compatible with either *-is* or *-n* (cf. (145b) and (145c)), *vosotros* is only compatible with *-is* (cf. (145a) and **Vosotros come-n*). That is, application of 2PI Impoverishment in an agreement morpheme entails application of Strong Colloquial Impoverishment in the subject it agrees with. A further wrinkle is added by the behavior of reflexive clitics. Like agreement, a second plural colloquial reflexive clitic can be exponed by either *os* or by third-person-like *se*. This is as expected, since 2PI Impoverishment applies to both clitics and agreement morphemes. However, there seems to be a dependency in this case as well, since, when

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

⁴⁴See Collins and Postal 2012. On imposters in Spanish, see Dudley 2014.

⁴⁵The fact that the third person-like behavior of *usted(es)* has been extended to its *pro* counterpart casts serious doubt on a synchronic analysis of the former as a camouflage DP, regardless of the correct analysis of the syncretisms in clitics and agreement morphemes discussed here.

Tables

		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	

(a) Nonreflexive clitics and agreement (in third person accusative, *-o-* forms are masculine, and *-a-* forms feminine)

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

(b) Reflexive clitics

Table 1: Pronominal clitics and finite agreement affixes in Spanish (non-Iberian dialects)

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

(a) Nonreflexive clitics and agreement (in third person accusative, *-o-* forms are masculine, and *-a-* forms feminine)

		First	Second colloquial	Second formal	3rd		
Sing	Accusative	me	te	se			
	Dative						
Pl	Accusative	no-s					
	Dative						

(b) Reflexive clitics

Table 2: Clitics and agreement affixes in non-Iberian Spanish (C: colloquial; F: formal)

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

(a) Nonreflexive clitics and agreement (in third person accusative, *-o-* forms are masculine, and *-a-* forms feminine)

		First	Second colloquial	Second formal	3rd
Sing	Accusative	me	te	se	
	Dative				
Pl	Accusative	no-s	o-s		
	Dative				

(b) Reflexive clitics

Table 3: Clitics and agreement affixes in Iberian Spanish

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

Table 4: Dialectal variation in second plural strong pronouns and agreement in Spanish