

Mesocclisis in the Imperative: Phonology, Morphology or Syntax?

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Mesocclisis in the imperative and parasitic plurals in Spanish are currently accounted for either at Morphological Structure (Halle and Marantz 1994) or at the PF interface (Harris and Halle 2005). In previous work (Manzini and Savoia 1999, 2004a, 2004b, 2005, 2007, 2008a, 2008b) we argued that these and similar phenomena in both Romance and Albanian are best accounted for at the syntactic level. Since sub-word constituency is involved, this amounts to saying that syntax subsumes morphology. Here we defend the conclusions of our previous work, including in particular a strictly lexicalist stance on the projection of morphosyntactic structures from the lexicon.

1. The analyses of Halle and Marantz (1994), Harris and Halle (2005)

Halle and Marantz (1994: 286) consider a mesocclisis phenomenon in Spanish varieties, whereby in imperatives a clitic cluster appears between a verb stem and its plural *-n* inflection, as in (1b). This contrasts with the simple enclitic pattern of standard Spanish in (1a).

- (1) a. de- n- me-lo
 give 2pl me it
 ‘Give it to me!’
 b. de- me-lo-n
 give-me-it -2pl

Halle and Marantz (1994) assume that the syntactic component generates structures of the type in (2a), where the clitic cluster, i.e. Det, is adjoined to the right of the constituent formed by the verb and its plural inflection. It is only in the morphological component that the clitic cluster ‘adjoins to the terminal Agr node to which it is already structurally adjacent’ (p. 285), yielding a structure of the type in (2b). To be more precise, given the Late Insertion hypothesis, what the syntactic and morphological rules manipulate are abstract feature clusters, which are represented in (2) by the corresponding terminals

- (2) a. $[[_T \text{ de}] \quad \quad \quad [_{Agr} \text{ n}]] \quad \quad \quad [_{Det} \text{ me lo}]$
 b. $[[_T \text{ de}] \quad \quad \quad [_{Det} \text{ me lo}] \quad \quad \quad [_{Agr} \text{ n}]]$

For Halle and Marantz (1994:287) ‘the positioning of the pronominal clitics is driven by the need of the terminal nodes carrying person and case features

[i.e. the clitic cluster] to appear to the left of the terminal node carrying the plural feature [i.e. the verb agreement]. The tucking in of the clitic(s) around the plural imperative suffix re-creates the usual order of affixes in inflected words, with the plural suffix to the right of other feature complexes'. They support this proposal with the observation that 'no tucking in occurs when the clitic itself is plural', as illustrated here in (3) 'and therefore its case and person features already are to the left of a terminal node with a plural feature'.

- (3) a. den los/nos
 give.2pl them/ us
 'Give them/ to us'
 b. *de- los-/ nos- n

The analysis of the same phenomenon proposed by Harris and Halle (2005) targets a lower level of organization of the grammar, namely PF. They preliminarily deal with what they take to be a simpler case, in which the *-n* plural morphology is copied on the verb and on the clitic, as illustrated in (4), where the absence of the first copy yields mesocclisis again.

- (4) venda- (n-) lo- n
 sell 2pl it 2pl
 'Sell it!'

In their view, (4) is a case of partial reduplication. Exactly like Halle and Marantz (1994), they take it that the syntax yields an enclitic structure, of the type in (5a) – where the terminals only appear after Lexical Insertion. At the PF interface, reduplication applies to the substring formed by the *-n* inflection and by the clitic, and the leftmost part of the reduplication is deleted, as in (5b). The square bracketing in (2b) denotes the portion of the string to be reduplicated, while the < bracket at the end of the input string indicates that the portion of the string following it is omitted in the second copy in the output.

- (5) a. [[_v venda] [_{Ag} n]] [_D lo]
 b. venda [n<lo] n~~lo~~

For Harris and Halle (2005), the inversion of the clitic constituent with respect to the *-n* inflection in (1b) is obtained through another partial reduplication, whereby the leftmost part of the reduplicated material is deleted in the first copy and the rightmost part in the second copy. In particular the > bracket at the beginning of the input string indicates that the portion of the string preceding it is omitted in the first copy in the output, as in (6). The superficial effect is that of an inversion or, in phonological terms, a metathesis.

- (6) venda [n><lo] n~~lo~~

The key to a successful derivation is the placement of the square and angled brackets in the relevant string. Harris and Halle (2005) formulate the readjustment rule for the placement of square brackets as in (7). Crucially, as they emphasize, 'representations of segmental phonology alone do not suffice to delimit the cases in which Kopy and V[erb] I[nflection] M[etathesis] are

possible; abstract (i.e. inaudible) identification of constituents is indispensable' (p. 202).

- (7) In a string of the form $X/n/_{Agr} \bullet /Cl/_{D}Y$
 Insert [to the immediate left of $/n/_{Agr}$
] to the immediate right of $/Cl/_{D}$

Harris and Halle (2005) offer a few arguments in favor of their approach. One concerns the fact that 'both Kopy and VIM occur freely in affirmative imperatives, where clitics follow the verb, but never in negative imperatives, where clitics must precede the verb' as in (8). 'This ... follows from the fact that both full and partial reduplication, and hence metathesis, affect only contiguous strings. Inflectional $-n$ and clitics are contiguous in affirmative but not in negative imperatives, where they are separated by the verb stem' (p. 204-205).

- (8) No lo(*n) haga*(n)
 not it do.2pl
 'Don't do it!'

By contrast, the correlation between mesoclis and enclis could only be accounted for by stipulation in the model of Halle and Marantz (1994). In the phonological model, since mesoclis is reduplication and the class of reduplication rules operates by definition on adjacent strings, then the adjacency requirement between the plural inflection of the verb and the clitic group (i.e. enclis) follows. In the morphological model the adjacency requirement needs to be stipulated. In the absence of an explicit adjacency requirement, as Manzini and Savoia (2004a: 169) note, 'there is no reason why a morphological rule that has the power of infixing (part of) an enclitic group shouldn't have the power of infixing (part of) a proclitic group.'

Furthermore, according to Harris and Halle (2005: 206) 'nothing must be added to our formal account' to predict cases like those in (2'), since 'the illformed examples are ruled out by independent phonological constraints', in particular the fact that $/sn/$ is an 'impermissible syllable coda ... in word-final position in Spanish'. Once again the comparison with Halle and Marantz (1994) is instructive; remember that morphological rules apply not on actual terminals, but on abstract features. Therefore the solution they propose, discussed above in connection with (3), is entirely based on the distribution of plural features.

2. A finer grained empirical picture

While Halle and Marantz (1994) only consider the simple data in (1), Harris and Halle (2005) introduce a more finely grained empirical picture. In particular they note examples where the $-n$ inflection is found between the first and the second clitic of a cluster, as in (9a); in other words only one clitic is in mesoclis while the other is in enclis¹. In (9b) we provide the schema of

¹ Harris and Halle (2005: 206) also illustrate cases where the splitting of a clitic cluster between mesoclis and enclis combines with copying of $-n$ on the verb; in other words, two copies of $-n$ appear on the verb and on the clitic in mesoclis, as in (i):

derivation for this option under the reduplication/ metathesis analysis. This derivation brackets the first but not the second clitic of the cluster together with the inflection for the sake of reduplication.

- (9) a. de- me- n lo
 give me 2pl it
 ‘Give it to me!’
 b. de [de < me] ~~n~~ me lo

Halle and Harris (2005) also notice that strings of the type in (10a), where the *-n* inflection is found to the right of a plural clitic, are illformed for the same reasons as (3b) is – i.e. the illformedness of the phonological output. However nothing prevents mesoclisys of the 1st person clitic only, as in (10b), which does not violate any phonological constraint.

- (10) a. *de- me- los- n
 b. de- me- n los
 give me 2pl them
 ‘Give them to me!’

By contrast, Halle and Marantz (1994) construct their analysis so as to exclude sequences of the type in (10b) as well – by assuming that *me* is prevented from tucking in between the verb base and its inflection by the fact that ‘it does not fall at the right periphery of the relevant domain; instead it falls to the left of the accusative plural clitic’ (p. 287). By the same reasoning, they exclude as far as we can tell all splittings of the clitic cluster on either side of the *-n* inflection.

The Albanian and Romance varieties studied by Manzini and Savoia (1999 ff.) also display splitting of clitic clusters under mesoclisys. Consider the Arbëresh (Italo-Albanian) variety of *S.Marzano* in (11), whose clitic system includes accusative and dative clitics, 1st/2nd person clitics, and the middle-passive clitic *u*². The 3rd person accusative and dative are found in enclisis in the 2nd plural imperative, as in (11a), while the 1st person singular clitic is found in mesoclisys, as in (11b). The position of the *u* clitic cannot be checked in most Albanian varieties because in the middle-passive, the 2nd plural imperative is not formed with this clitic but with a specialized inflection of the verb (Manzini and Savoia 2008, Manzini, Roussou, Savoia to appear). However the Arbëresh variety of *S.Marzano* that we illustrate does fairly systematically double the

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- (i) den- me- n lo
 Give.2pl me 2pl it
 ‘Give it to me!’

Here and in what follows we concentrate on mesoclisys/ VIM, as Harris and Halle (2005) in fact do in the later part of their article. We nevertheless return to copying later in this section and in section 5.

² Our data here and in the rest of the text are phonetically transcribed from fieldwork sessions. A broad IPA transcription is employed. In particular, to help the reader process the examples we have inserted hyphens between verbs bases and their inflections as well between them and other intervening lexical material (clitics). The word stress is not notated when trivial (e.g. on monosyllables). In the discussion, we refer to 3rd person accusative and dative clitics simply as accusative and dative. The set of 1st and 2nd person clitics will be referred to as person clitics.

specialized inflection γ - by means of u . Thus it can be seen that the latter occurs in mesocclisis, as in (11c).

- (11) a. 'hua- nni j a *S.Marzano*
 say 2pl to.him it
 'Say it to him'
 b. 'hua- mmə- ni ε
 say to.me 2pl it
 'Say it to me'
 c. siɟʝə- γ- u- ni
 wake.up MP MP 2pl
 'wake up!'

Consider then the Romance variety of *Senise* in (12)-(14). Both the 1st plural inflection, as in (12), and the 2nd plural inflection, as in (13), can split from the verb base yielding mesocclisis. The dative clitic in (13a), the 1st person clitic in (13b) and the locative clitic in (13c) are found in mesocclisis. The accusative clitic is found in enclisis in all examples, as is the partitive in (13d). Example (13e) shows that the very same clitic *nə* (syncretic in traditional terms between the 1st plural reading and the partitive reading) appears in enclisis when it is partitive, but in mesocclisis when it is a person clitic. Examples like (14) show that ordinary enclisis is also an available option, not only with single clitics but also with clitic clusters.

- (12) purtæ- d'd- imə lə *Senise (Lucania)*
 bring him-her-them 1pl it-them
 'Let us bring it/them to him/her/them!'
- (13) a. ra'vi- ddə- tə tuttə
 give him-her-them 2pl everything
 'Give him/her/them everything'
 b. tʃirka- 'm-/n'n- itə lə
 ask me/us 2pl it-them
 'Ask me/him/her/them for it/them!'
 c. mətta- t'tʃ- itə lə
 put there 2pl it-them
 'Put it/them there!'
- d. tʃirka- dd- itə nə ruɟə
 ask him-her-them 2pl of.them two
 'Ask him/ her/ them for two of them!'
- e. ra- n- itə nə ɣunə
 give us 2pl of.them one
 'Give us one of them!'
- (14) a. purtætə mə/ nə/ də kwistə
 Bring.2pl me/ us/ him-her-them this
 'Bring this to me/us/him/her/them!'

- b. purtætə mə lə
bring.2pl me it/them
'Bring it/them to me'

Note that standard Albanian (represented in (15) by the variety of *Gjirokaster*) has mesoclis of all clitics, including clitic clusters³.

- (15) a. jep- i- a- ni *Gjirokaster*
give him-her-them it 2pl
'Give it to him/her/them'
b. nə- m- a- ni
give me it 2pl
'Give it to me'

Harris and Halle (2005) make a final empirical point concerning Spanish varieties where clitics clusters are split. This is that there appears to be a hierarchy of clitics, such that some speakers only allow *se* in mesoclis, as in (16a), others *se*, *me*, as in (16b), others yet *se*, *me*, *le*, as in (16c). Evidently our data for *Senise* in (12)-(13) also exemplify a language of the type of (16c) where only the accusative is in enclisis, while those of *S.Marzano* in (11) exemplify a language like (16b) where both 3rd dative and 3rd accusative are in enclisis, showing that the hierarchy in (16) captures a genuine cross-linguistic generalization.

- (16) a. *se* vs. *me le lo*
b. *se me* vs. *le lo*
c. *se me le* vs. *lo*
d. *se me le lo*

Let us assume with Harris and Halle (2005) that languages of the type in (16d) simply place no restriction on the mesoclitic position, requiring no further attention. Already the statement that languages like (16a) 'require formal specification of just that [*se*] clitic' as part of the readjustment rule seems to us problematic. For, it does not take into account the fact that this single clitic itself belongs to the hierarchy. In other words, if all that is involved in languages like (16a) is a stipulation concerning a particular clitic, then there is no reason to expect that it will always be *se*. Thus we do not know of a single language where a 3rd person accusative, or a 3rd person clitic in general, occurs in mesoclis to the exclusion of 1st/2nd person clitics, middle-passive (reflexive) clitics etc. As far as we can tell, this cannot be predicted by Harris and Halle (2005).

As for the distinction between (16b) and (16c), Harris and Halle (2005) have two ways of approaching it. The first possibility is that 'the order of appearance of clitics in [the hierarchy] is correlated with the degree of neutralization or lack of specification for number, case and gender'. The other explanation they prospect is that languages (16b) and (16c) are differentiated by the fact that while the class III inflection *-e* of *se* and *me* is intrinsic, the class III inflection

³ In (15a) and (15b) two different lexical bases alternate for the verb *give*. The specialized base in (15b) is required by the presence of reference to the speaker (*m*).

of the dative *le* is the result of a redundancy rule. Therefore (16b) is a language in which reduplication/ metathesis applies before the redundancy rule and (16c) a language where it applies after the redundancy rule.

The general problem we see with the second proposal is comparable to that already discussed in connection with languages like (16a). Given that it is evidently a stipulation that mesoclisism goes with III class and enclisis with other classes, we may expect that there are languages that keep the same distinction but reverse it – in other words, where 3rd person accusative clitics go in mesoclisism while datives, 1st/2nd person and *se* go in enclisis. Yet no examples of this pattern are found as far as we can tell. In other words, Harris and Halle (2005) are able to capture the distinction between the two groups of clitics but not the hierarchy that orders them.

More generally, low level morphological properties, such as those targeted by Harris and Halle (2005) are likely to display variation even in closely related languages, let alone across linguistic families. The cross-linguistic nature of the hierarchy in (16) seems to point to a higher level of organization of the grammar, in fact a level high enough to be insensitive to lower level morphophonological properties. For instance, it remains to be established whether and how Harris and Halle's (2005) proposals apply to Albanian. For, the notions of I/II vs. III class inflection obviously do not apply to this language (cf. Manzini and Savoia to appear b for a review of nominal inflection in Albanian). Similarly, it seems far from straightforward to apply a correlation with the degree of neutralization. Thus *i*, which appears in enclisis, is both dative and accusative plural and as such is certainly not more specified than *m* (1st person singular), which appears in mesoclisism.

But take just variation across Romance varieties, as witnessed to by our data. A language like *Senise* in (13) differs from Spanish varieties in having clitics for the locative and the partitive. There are no difficulties in accommodating the locative under one or the other of Harris and Halle's (2005) proposed generalizations, since the locative *tʃə* appears to follow the same III class/underspecified pattern of other mesoclitic elements. But take the *nə* clitic. There are two difficulties with it. First, restricting ourselves to the partitive reading of the clitic, we observe that it occurs in enclisis, as in (13d). Yet, if underspecification is taken as the guiding principle for the clitic hierarchy, we expect *nə* to appear high in the hierarchy, since it is syncretic with the 1st person plural. If the I/II vs. III class divide is taken as relevant, then *nə* clearly belongs to the same (III class) series as elements that appear in mesoclisism – so that its enclitic position is unexpected. If the objection is raised that in a language like *Senise* the 3rd person accusative *lə*, not specialized for gender and number, does not itself belong to the I/ II class, then the problem is worse, since the I/II vs. III class criterion becomes totally inapplicable.

The second problem with *Senise*'s *nə* arises precisely in connection with the fact that the partitive and the 1st plural readings are syncretic. While example (13d) shows that partitive *nə* occurs in enclisis, example (13b) shows that 1st person plural *nə* occurs in mesoclisism. In other words, what is relevant for the ordering is not the morphophonological shape of the clitic, attainable by Harris and Halle's (2005) level of analysis (i.e. PF), but its reading, which appears to relate to the level of morphosyntax or higher.

Leaving now aside the hierarchy in (16), Manzini and Savoia (2004a ff.) note a further problem. All mesoclis phenomena reviewed so far involve the infixation of clitics between the verb base and an agreement inflection. This is duly encoded in the readjustment rule of Harris and Halle (2005) as well in the treatment of Halle and Marantz (1994). The problem is that there is no reason in either treatment why this restriction should hold – in other words, why mesoclis in some language could not split the verb base from a Tense/ Mood/ Aspect inflection⁴. Note that this could be compatible with the correlation of mesoclis to enclisis just noted, for instance if mesoclis split the verb base from the inflection of the infinitive. For, the latter in Spanish normally cooccurs with enclisis.

Another question arises in connection with doubling phenomena. It is worth emphasizing that the Calabro-Lucanian varieties studied by Manzini and Savoia (2004a ff.) are comparable to Caribbean Spanish ones in allowing for the doubling of the inflectional material, as illustrated here in (17). In the same contexts, i.e. imperatives with mesoclis, however, we also find attestations of doubling of the clitic in mesoclis and in enclisis, as in (18).

- (17) purtæ- tə- 'm- itə lə/ nə Senise
 bring 2pl me 2pl it-them/ of.it-them
 'Bring it/them/some of it/ some of them to me!'

- (18) a. ra- d'di- mə ddə tuttə
 give him-her-them 1pl him-her-them everything
 'Let us give him/her/ them everything!'
 b. ra- 'm- itə mə kwistə
 give me 2pl me this
 'Give this to me!'
 c. ra- 'm- itə mə lə
 give me 2pl me it-them
 'Give it/them to me!'
 c'. mbresta- 'm- itə mə nə

⁴ In more than one occasion when this material was presented, the audience questioned this generalization. Potential counterexamples offered to us were of two types. On the one hand it was pointed out to us that in European Portuguese mesoclis occurs in infinitival environments. Note however that this strengthens our conclusion. For, the clitic appears between the verb inflected with the infinitive (i.e. irrealis) *-r* morphology and the finite inflection, as in (i). Crucially it cannot separate the verb base from the *-r* morphology.

(i) dar- t-/lh- o- ia
 Give to.you/him it I.would
 'I would give it to you/him'.

Furthermore, it was pointed out to us that while the normal sequence in Romance has TMA inflections preceding agreement ones, the infixation of the agreement morphology between the verb base and the TMA morphology is also attested in some Ladin varieties, as in (ii) (cf. Benincà 1999).

(ii) a. dor'mj-oŋ b. dor'mj-oŋ-va c. dor'mj-oŋ-sa Corte/ Sief
 sleep-1pl sleep-1pl-impf. Sleep-1pl-counterf.
 'We sleep' 'We slept' '(if) we slept'

This phenomenon again does not count as a counterexample to our generalization, since in conventional terms it reorders two inflections, as in (iii) – and does not involve the splitting of the verb base from its inflection(s) by other lexical material.

(iii) [[_I dormj]] [_D oŋ]] [_T va] Corte/ Sief

lend me 2pl me of.it-them
 ‘Lend me some of it/them!’

Here the question is what kind of treatment Harris and Halle (2005) envisage for doubling processes of the type in (18). If they apply to (18) the same phonological treatment that derives inflectional doubling of the type in (17), they capture the continuity between these two phenomena. Yet we know that copying of clitics is also a process normally admitted to occur at the much higher level of syntax, since the two copies can be separated by major syntactic constituents (as illustrated below in (23)). A phonological treatment of (18) amounts to denying that there is any continuity between the various types of clitic copying/ doubling. Again it is far from obvious that this is the correct conclusion.

Let us summarize so far. The review of the salient proposals by Harris and Halle (2005) and by Halle and Marantz (1994), and the comparison of these two analysis with the empirical evidence of Manzini and Savoia (1999ff.) allows us to draw a provisional list of desiderata for the analysis of mesoclis in the imperative – as well as of the way the two analyses proposed so far do or do not satisfy them. First, mesoclis is possible only in contexts that in the same languages or in closely related ones allow for enclisis. There is no possibility of mesoclis as a variant of proclisis. A particularly striking illustration of this is provided by negative imperatives, which forcing proclisis as opposed to enclisis, also prevent mesoclis, as we will see in section 5. As far as we can tell, Halle and Marantz (1994) could only stipulate this fact; Halle and Harris (2005) derived it as a result of the adjacency requirement on reduplication (see the discussion surrounding (8)).

Second, in languages where mesoclis splits the clitic cluster, this splitting observes certain general principles such as the possibility of having the 3rd person accusative in enclisis and the remaining clitics in mesoclis (as in *Senise*) – but never the reverse. Halle and Marantz (1994) are simply not aware of the relevant data. But Harris and Halle (2005) do not far much better. For instance, under the account they sketch, there is no reason why we should not expect a language where the hierarchies in (16) are respected but reversed. This fact can at best be stipulated; it does not follow from any independent principle. Finally, there are generalizations that neither of the accounts reviewed seems to be aware of – though they are discussed at length by Manzini and Savoia (2004a ff.). First, it appears to be the case that only finite (i.e. agreement) inflections can be split from the verb base under mesoclis. Second, there appears to be a continuity between the doubling of inflections (possibly a morphophonological process) and the doubling of clitics – ostensibly a syntactic phenomenon. This continuity must be proven inexistent or else it requires a unification of the levels of analysis involved.

3. The reduplication straightjacket

The rich literature on reduplication characterizes it as a phonological process which operates at the interface between morphology and phonology. This literature shows that in natural language, both total and partial reduplication of a lexical string is to be viewed as a type of affixation. According to Marantz (1982: 436) ‘Except for the fact that the material attached to the stem in

reduplication resembles the stem phonologically, reduplication rules look like normal affixation processes. To provide the best account of reduplication rules, we say they are normal affixation processes'. These affixes are, as we can expect, associated with grammatical/ functional values (i.e. intensive, perfect, plural, etc.)

Marantz's (1982) reduplication is a readjustment rule which copies phonological material from the lexical basis on the skeletal template associated to an affix. Phonological constraints define the melody copying process: 'In the unmarked case, reduplicating prefixes associate with their melodies from left to right, reduplicating suffixes from right to left. The association of phonemic melodies and C-V reduplicating affixes is "phoneme-driven" in the sense that, for each phoneme encountered linking from left to right or from right to left, the association procedure scans along the skeleton to find a C-V slot eligible for association with the phoneme' (446). The example of reduplication in (19), concerning plural noun formation in Agta (a language spoken in the Philippines), illustrates the copying mechanism (from Marantz 1982: 446).

$$(19) \quad \begin{array}{ccc} \text{t a k k i} & & \text{t a k k i} \\ | | | | & \rightarrow & | | | \\ \text{CVC} + \text{CVCCV} & & \text{CVC} + \text{CVCCV} \end{array} = \text{taktakki}$$

McCarthy and Prince (1995) set the treatment of reduplication within Optimality Theory. The idea is that reduplication is again a relation between an input of the type Aff + base, and an output derived through a copying process. A crucial role is assigned to the ranking of the faithfulness constraints which relates input-output representations and accounts for the different types of reduplication. In general, they assume that 'the regularities of reduplication and similar phenomena' must be derived 'from general properties of morphology, general properties of phonology, and general properties of the interface between morphology and phonology' (p. 11).

According to the more recent proposal of Raimy (2000) 'the morphology builds reduplicated structures by adding 'loops' ... to the precedence structure of a V[ocabulary] I[tem]' (Harrison and Raimy 2004). For instance given the Vocabulary item in (20a) (from the Uto-Aztecan language Tohono O'odham, cf. Raimy 2000:113), with the precedence structure notated by the arrows, the reduplication consists in the adding of the loop in (20b), notated here beneath the *ho* subsequence. 'Following the modular structure of DM, these representations are then passed onto the phonology. The phonology contains a linearization process that eliminates loops via repetition, as in [20c]'. The crucial aim pursued by Harrison and Raimy (2004) is to provide evidence in favor of the conclusion that reduplication is 'the result of the spell-out of a Vocabulary Item'.

- (20) Tohono O'odham CV reduplication
- a. *root* 'the body' # → h → o → n → %
 - b. *root* 'the body' + *plural* # → h → o → n → %
 └─┘
 - c. *linearized* [hohon]

Finally, Halle (2008) adopts the guiding principles of the phonological analysis of reduplication proposed by Raimy (2000). The ‘crucial innovation’ of Raimy is to admit phonological representations including a double concatenation of the timing slots: the traditional linear concatenation and an accessory extralinear concatenation feeding the reduplication mechanisms. In any case, reduplication is a ‘readjustment rule’ triggered by a zero morpheme (Halle 2008: 329).

The point that this brief review of the phonological literature on reduplication should bring into relief is that the work of Harris and Halle (2005), while making use of the mechanics of reduplication as defined in phonological analyses, is conceptually anomalous with respect to them. In particular, in the reduplication treatment of mesoclisism, there is no morphologically defined template with autonomously defined features, justifying the application of reduplication. Both in Agta in (19) and in Tohono O’odham in (20), the reduplication skeleton or loop is the morphology for plurals in the relevant languages. But there is no morphological feature associated with the mesoclisism of Romance or Albanian. Rather, the mesoclitic formations have the same interpretation and morphosyntactic make-up as the enclitic structures with which they are in free alternation in many varieties.

An important conceptual point concerning the phonological-level analysis of Harris and Halle (2005) is that the readjustment rule in (7), which defines the reduplicated string, not only contains a considerable amount of morphosyntactic level information, but more to the point contains absolutely no information of a prosodic or segmental nature. Thus, if the operation applied on abstract terminals, before the level of lexical insertion where vocabulary items become relevant, it would give exactly the same results. This is of course not true of *bona fide* phonological reduplications such as (19) or (20). In other words, Harris and Halle’s (2005) reduplication really seems to be a syntactic rule in disguise.

A further problem for Harris and Halle (2005) connects with this general observation. As they themselves note, there are other phenomena in Romance languages where the lexical base is separated from its inflection by other lexical material. One such phenomenon is the ‘parasitic plural’ of Spanish under which the *–s* plural morphology interpreted as part of the dative clitic, overtly combines with the accusative clitic, for instance *los* in (21).

- (21) Ese vino yo se los regalé a mis primos.
 that wine I to.them it I.gave to my cousins
 ‘That wine I gave to my cousins.’

Under the metathesis treatment of mesoclisism in the imperative, the apparent continuity with phenomena such as the parasitic plural cannot be captured. The reason is that, as shown in (21), parasitic plurals characterize environments where the dative *le/les* ‘to him-her/ to them’ does not surface; rather, the suppletive *se* form does. Because there is no **ses* in the language, *se* cannot be the source of the *–s* appearing after the accusative *lo* ‘it’ in (21). This excludes a treatment in terms of phonological reduplication, which would require **ses* in the underlying string, and necessitates a treatment at the morphological level, where rules operate on abstract terminals (cf. Harris 1994 for such a treatment

within the Distributed Morphology framework)⁵.

In this respect Halle and Marantz (1994) seem to have a better handle on the level of generalization required for a unified account of all of these various data, since their analysis targets not the phonological level of organization, but the morphological level. Yet Manzini and Savoia (1999 ff.) emphasize a different problem of explanatory adequacy they face. The operation remerging the Det constituent from the position in (2a) to the position in (2b) is formally identical to the syntactic operation of movement. At the same time there are obvious constraints on syntactic remerge – such as the Extension condition of Chomsky (1995) that are violated by a tucking in movement like (2). Thus ‘under the morphological derivation, the operation of movement in the syntax is actually duplicated by an operation of movement in the morphology: to the extent that the two operations have the same properties a redundancy arises; to the extent that they differ the grammar is considerably enriched’ (Manzini and Savoia 1999: 296).

The reason we introduce this very general point is that it leads the way to an altogether different approach to the mesoclisism and doubling phenomena at hand, namely an approach in which they are handled within the component where movement processes are independently needed as are the categories/ features that these processes ostensibly manipulate – namely syntax.

4. A syntactic analysis

In the remaining part of this article, following Manzini and Savoia (1999 ff.) we provide an analysis of the Romance and Albanian data presented so far that keeps entirely within the bounds of the syntactic component⁶. We argue that this analysis provides an answer to all of the questions raised above for morphophonological level analyses, as well as eliminating the syntax – morphology redundancy problem noted at the end of the last section. In other words, we would like to claim that the burden of proof is on proponents of morphophonological treatments to show that such treatments are still necessary (and eventually sufficient).

In the course of the previous sections it has become clear that what are at stake are not ‘two curious idiosyncratic phenomena of Spanish dialects’ (Harris and Halle 2005: 204) but phenomena cropping up with some regularity in Romance languages as well as in (non directly related) Albanian varieties. Yet the reason why we enter into the discussion is not so much the intrinsic interest of the phenomena themselves as the theoretical implications they hold. For, if the phenomena admit of an analysis entirely within the boundaries of syntax, as we want to propose, it follows that syntax can reorder constituents below the word level, i.e. inflections – which means in turn that the distinction between

⁵ Of course, a split account for mesoclisism in the imperative and for parasitic plurals is only problematic to the extent that the two have common properties. The discussion of Manzini and Savoia (2009) is devoted to establishing that these two phenomena as well as a number of related phenomena in Italian varieties require a unitary account.

⁶ A different syntactic construal of the mesoclisism facts is presented by Kayne (2008). The unpublished nature of this work prevents us from discussing it in detail, though we shall return to parts of it in fn. 8, 10 and in section 6. As for Kayne’s (2008) discussion of Harris and Halle (2005) and of Halle and Marantz (1994), it reiterates the objections we raise in our work. Since Kayne (2008) shows no awareness of Manzini and Savoia (1999 ff.), and his discussion ostensibly does not depend on ours, we conclude that such objections are fairly self-evident within the model we adopt.

syntax and morphology is essentially erased. In this respect we embrace Halle and Marantz's (1994: 285) statement that the facts 'argue strongly for the parallel between word-internal and word-external syntax that DM predicts' – and we generalize it to the conclusion that what is involved is not simply a (partial) parallelism, but rather a (complete) unification of the two modules. In other words syntax subsumes morphology.

We take this unification to extend to one key task apportioned by Distributed Morphology to Morphological Structure, i.e. Vocabulary Insertion, which in the architecture of grammar proposed by Halle and Marantz (1993) is 'late', i.e. follows morphological readjustments. By contrast, the model of syntax we adopt here adheres strictly to the minimalist postulate of projection from the lexicon (Chomsky 1995), which we interpret as requiring that syntactic structures be projected from actual lexical terminals. This lexicalist construal of the Inclusiveness condition is as far we can tell the one intended by Chomsky (1995) himself. If so, note that our unified morphosyntax defines the PF interface as well.⁷

Let us begin with a point on which there is full agreement between Halle and Marantz (1994), Harris and Halle (2005) and us – namely the fact that enclisis in the imperative as in standard Spanish (1a) is derived by syntax-internal operations. Following Rivero (1994) and much related literature we assume that the imperative appears in a high position in the sentence, i.e. within the C field, associated with the modal properties of the verb. Since at least Kayne (1991), enclisis of the pronominal clitic on the verb has been taken to be a consequence simply of the movement of the verb to this high position. The postverbal position of the clitic(s) follows from the raising of the verb if the clitics remain in their ordinary inflectional position.

A classical body of work initiated by Rizzi (1997) argues that the C field of sentences is articulated in several C heads. The distribution of object clitics suggests that the imperative occupies a higher position than the finite verb involved in V2 contexts such as questions. For, object clitics precede finite verbs in the V2 position; yet they follow imperatives. Keeping C as the conventional label for the properties instantiated by (residual) V2, we notate the position instantiated by imperatives (and infinitives) as C_I , to suggest Irrealis. Since we observe C_I – object clitics and object clitics – C, we infer C_I – C, as in (22).

(22) [C_I [C [I(nfl)

The next assumption we will make is that clitics not only correspond to syntactic level constituents but each of them has its own dedicated and categorially distinct position. This conclusion characterizes our work – but can be found in independent work as well. Thus Poletto (2000) has autonomous (and autonomously categorized) positions at least for subject clitics – while

⁷ Phenomena that crucially motivate Late Insertion in Distributed Morphology specifically include syncretism and suppletivism. Manzini and Savoia (2005, 2007, to appear a) argue for an analysis of these phenomena (as seen in Romance clitics, Romance and Albanian verbal and nominal inflections, Albanian Case inflections) consistent with the larger picture in the text. In other words, syncretic/ suppletive forms project their actual lexical specification in syntactic structure – and their multiple functions correspond to ambiguity resolution at the LF interface. See also fn. 12.

autonomous positions/ categories for all clitics are proposed by Sportiche (1996)⁸.

Recall now the existence in *Senise* of examples where doubling in the imperative involves a clitic copied both in mesoclis and in enclisis. Doubling of clitics is anything but a rare occurrence in either Romance or Albanian – and the two occurrences are typically separated by verbal or other heads (negation etc.). Here we provide examples from the Arbëresh variety of *S.Marzano*, with which we also illustrated mesoclis. In (23), 3rd person accusatives and datives copy on either side of the finite auxiliary, while 1st and 2nd person clitics appear before it.

- (23) a. j a kamm j a hønnə *S. Marzano*
 him-her-them it I.have him... it said
 ‘I have said it to him/her/them’
 b. t ε kamm ε hønnə
 to.you it I.have it said
 ‘I have said it to you’

The distribution in (23) is limited to auxiliaries, while all clitics appear in proclisis on lexical verbs, evoking comparison with English questions, where auxiliaries take a C position, higher than that of lexical verbs. We surmise that the auxiliary in (23) is in C, and that enclisis of the accusative and dative depends on this position. Clitics occurring above I but below C will surface in enclisis. On the other hand clitics will have to occur higher than C in order to surface before the auxiliary. This leads us to identify at least two different positions for clitic categories, as schematized in (24).

- (24) [C₁ [CL* [C [CL* [I(nfl)

The reader may have noticed that clitics found in proclisis and in enclisis in (23) closely match those found in mesoclis and in enclisis respectively in the imperative examples in (11). In fact the split between accusative and dative on the one hand and 1st/2nd person clitics on the other, remains fairly constant in Albanian varieties independently of the configurations (of proclisis, mesoclis, enclisis) it gives rise to. In the Arbëresh variety of *Greci* in (25), the accusative clitic follows the imperative, as in (25a), while the 1st person clitic precedes it, as in (25b). When they combine, the 1st person clitic is in mesoclis, while the accusative remains in enclisis. Thus the mesoclitic or proclitic position of the 1st person varies, but what does not vary is its split from the accusative.

⁸ We note that Kayne (2008) now assumes that ‘sequences of clitics never form a constituent’, contrary to what explicitly predicted for instance by Kayne (1994). At the same time we are extremely puzzled by the statement that Savescu-Ciucivara (2007) (not available to us) ‘comes closest’ to holding such a proposition. For, we explicitly exclude clitic clusters beginning with our earliest work. Thus Manzini and Savoia (1999), quoting even earlier work by Manzini and Savoia (1998), state ‘According to our theory each clitic realizes a specialized position in the clitic string, characterized by a well-defined set of features and ordered in a fixed way with respect to other positions’ (p. 292).

- (25) a. zɔ- nni a *Greci*
 wake.up 2pl him
 ‘Wake(pl) him up’
 b. mə/ na zɔ- nni
 me/ us wake.up 2pl
 ‘Wake me/us up’
 c. 'ne- m- ni a
 give to.me 2pl it
 ‘Give it to me’

In the variety of *Shkodër* in (26), the accusative clitic appears in enclisis, as in (26a), while the 1st person clitics appear in proclisis, as in (26b). As expected, dative-accusative cluster appears in enclisis, as in (26c). Interestingly the presence of a 1st person clitic requires the proclisis of the entire group, as in (26d-d'). Thus *Shkodër* is quite different from other Albanian varieties considered so far⁹ in that it always keeps clitic groups together. However the split between accusative/dative and 1st person clitic has a reflex in the enclisis/proclisis alternations affecting such groups.

- (26) a. ʃifni ε *Shkodër*
 look.2pl him-her
 ‘Look at him/ her!’
 b. mə/ na ʃifni
 me/ us look.2pl
 ‘Look at me/us!’
 c. nəpni j a
 give.2pl to.him-her-them it
 ‘Give it to him/ her/ them!’
 d. m a nəpni
 to.me it give.2pl
 ‘Give it to me!’
 d'. na ε nəpni
 to.us it give.2pl
 ‘Give it to us!’

We briefly return to how the various enclisis – proclisis alternations in (25)-(26) fit into the schema in (24) in the next section, after we consider how mesocclisis does. Summarizing so far, while it is generally agreed that enclisis in the imperative is a syntax internal matter, in this section we have entered in some detail in the syntactic analysis we adopt – setting the stage for our analysis of mesocclisis. Thus in (24) we adopt an articulated set of C positions, among which imperatives target the higher one. Clitics project autonomous positions/categories onto the syntactic tree; these are found in at least two different domains of the sentence, the inflectional domain and the modal domain. Such conclusions are not based on a priori considerations but on empirical evidence.

⁹ Traditional Albanian dialectology distinguishes two main groups of varieties: Tosk and Geg. Both Arbëresh and standard Albanian (represented here by *Gjirokastër*) belong to the Tosk group, while *Shkodër* is a Geg variety.

It is very important for us to emphasize that we are not overstepping at any point the boundaries of standardly accepted syntactic reasoning. For, the final aim of our discussion is to show that mesoclisys is entirely explainable within syntax; but if so, it is obviously important that our syntax does not conceal extra devices.

5. Mesoclisys as a syntactic phenomenon: the core analysis

Since copying of the clitic has provided key evidence in section 4, we resume our analysis of mesoclisys with the examples of *Senise* in (18) which presents the doubling of the clitic in mesoclisys and in enclisis. In accordance with the schema in (24), the two copies of the dative or 1st/ 2nd person clitic in (18) will be found in the domain immediately above C and in the domain immediately above I respectively (henceforth the C and I domain). This will also mean that the single copy of the accusative clitic in (18c) is found in the I domain. The verb base, that precedes all clitics will be in the higher modal position C_I, as schematized in (27). One thing that the previous discussion does not provide any indications on is precisely the defining property of the mesoclisys phenomenon, i.e. the position of the inflection. We provisionally notate clitic positions as CL; we return to their exact nature in section 6.

(27) [C_I ra [CL m [??itə [CL mə [CL lə *Senise*

In section 4 we argued that multiple instantiations of a clitic are a syntactic level phenomena, because of the instances of doubling where the clitic copies are separated by syntactic constituents. In other words, if the copying of the clitic in proclisis and in enclisis in *S.Marzano's* (23) and the copying of the clitic in mesoclisys and in enclisis in *Senise's* (27) are the same kind of phenomenon, then mesoclisys must be defined within the syntax, as enclisis and proclisis are. We exclude that two different levels of analysis are involved in the various cases at hand, not only on simplicity grounds, but also on empirical grounds. Thus a very similar distribution of object clitics characterizes both (23) and (27), typically splitting the 3rd person accusative from 1st/ 2nd person clitics.

The unified syntactic analysis we pursue at this point simply requires that we fix the nature of the category projected by the inflectional material in (27). The obvious solution that comes to mind (Manzini and Savoia 1999) is that the inflection sits in a verbal position in between the clitics, namely C, as shown in (28).

(28) [C_I ra [CL m [C itə [CL mə [CL lə *Senise*

There is no obvious derivational/ representational constraint excluding (28) on the assumption that verbs move/ form chains. Thus (28) could be derived by moving *ratə* to C and then moving the verb base *ra* to C_I. As far as we can tell, the resulting structure respects the basic c-command requirement on chains. Yet (28) has another problem, namely that it provides no insight as why an agreement inflection can be split by the verb base, but not a Tense/Mood/Aspect inflection. For, if (28) is the correct structure for mesoclisys, one could equally have a structure where the agreement inflection is replaced, say, by the

infinitival inflection¹⁰.

Starting with Manzini and Savoia (2004a) we have therefore proposed a different approach to the structure of mesocclisis – based in particular on the nominal nature of the inflection stranded by the verb base in mesocclisis phenomena (with or without doubling). The basis for our analysis is the idea that agreement morphemes within the inflected verb project a position which has the same categorial signature and other relevant syntactic/ LF properties as a pronominal subject. Thus the internal structure of the inflected 2nd person plural imperative of *Senise* in (29a) closely parallels that of an English sentence like (29b). Following Chomsky (1995) we adopt D as the categorial signature of the EPP argument; we take the verb base inclusive of the so-called thematic vowel to correspond not to the root, but to an inflected constituent, whence its I categorial signature.

- (29) a. [_I ra [_D tə]] *Senise*
 b. [_D you [_I give]]

Starting with Manzini and Savoia (2004a) we have further proposed that in mesocclisis contexts, the so-called agreement inflections project on the syntactic tree the same position that subject clitics project in varieties that present them. This is equally applicable to mesocclisis with clitic doubling, as in (30a), now replacing (27)-(28) and to simple mesocclisis, as illustrated in (30b) for example (13b). As for the doubling of the inflection, in (17), it equally fits the syntactic schema now defined, if we assume that the first copy of the inflection is attached to the verb base in the C_I position and the lower copy is stranded in the D position, as in (31). The pattern of *S.Marzano* (11b) is amenable to the same schema as *Senise*'s (30b).

- (30) a. [_{CI} ra [_{CL} m [_C [_D itə [_{CL} mə [_{CL} lə *Senise*
 b. [_{CI} tʃirka [_{CL} m [_C [_D itə [_{CL} lə

- (31) [_{CI} purtætə [_{CL} m [_C [_D itə [_{CL} lə

¹⁰ Kayne (2008) implements a syntactic analysis for mesocclisis and doubling which scatters the verb base and the inflection in the verbal positions of the sentence not through movement but through the postulation of ‘silent’ categories, in the sense of Kayne (2006). Thus mesocclisis with doubling of *-n* in Caribbean Spanish, as in (4) in the text, corresponds to the whole inflected imperative moving to a left periphery position where it is followed by the clitics; the stranded inflection is in reality attached to a ‘silent’ Aux, as in (i). In this perspective, Kayne (2008) concludes that in simple mesocclisis examples there is ‘probably’ a silent *-n* attached to the verb base as in (ii) (‘silent’ categories are capitalized).

(i) den le AUX-n
 (ii) [haga-N]_i lo AUX-n t_i

Elsewhere (Manzini and Savoia to appear a, Savoia and Manzini to appear), we have raised both theoretical and empirical issues concerning ‘silent’ categories as applied in particular to syncretisms in Romance clitic systems. Many of the general objections apply in the case at hand. Thus what is to restrict the appearance of ‘silent’ auxiliaries? Kayne (2008) makes a reference to auxiliaries ‘visibly seen in negative imperatives in some Northern Italian dialects’. But those auxiliaries are seen precisely in negative contexts, where mesocclisis never occurs and they embed infinitives or gerunds, as auxiliaries generally do in Romance (see Manzini and Savoia (2005) for extensive exemplification); therefore the silent auxiliary in (i)-(ii) is not their unpronounced counterpart.

Gjirokastër in (15) represents the simple variant of (30b) in which an entire clitic group fits between the verb base in C_1 and its inflection in D. More complex are the cases of *Greci* in (25) and *Shkodër* in (26). In *Greci* mesoclis again follows the lines of (30b), as shown in (32a). When the inflection is not split from the verbal base, however, the inflected imperative appears to sit in the C position where it is followed by the accusative clitic, as in (32b) and preceded by the 1st person clitic, as in (32c).

- (32) a. [_{CI} ne [_{CL} m [_C [_D ni [_{CL} a *Greci*
 b. [_C zɔnni [_{CL} a
 c. [_{CL} mə/ na [_C zɔnni

The patterns of *Shkodër* correspond closely to (32b-c) of *Greci*. The inflected imperative is in the C position where it is preceded by clitic clusters containing a person clitic, as in (33b), and followed by clusters which do not include a person clitic, as shown in (33a). The interesting pattern whereby clitic clusters cannot be split, configures a parameter in the distribution of clitics, rather than in the position of the verb. We shall return to it briefly in section 6.

- (33) a. [_C nepni [_{CL} j [_{CL} a *Shkodër*
 b. [_{CL} m [_{CL} a [_C nepni

Other facts noted above as problematic for morphophonological level analyses of mesoclis follow from its syntactic analysis, in particular the fact that mesoclis is restricted only by morphosyntactic properties; this fact remains mysterious in the phonological treatment of Harris and Halle (2005). At the same time, the correlation between enclisis and mesoclis, that could only be stipulated by Halle and Marantz (1994) is derived. In order for object clitics to appear between the verb base and the verb inflection, there must be syntactic space available for their insertion. This condition is satisfied when the verb base moves high enough to take object clitics to its right, hence in particular in imperatives, but not when it remains lower, taking object clitics to its left (in proclisis).

More generally, recall that we objected to Distributed Morphology because of its redundancy with syntax. The re-merging of the clitic cluster in (2) that Halle and Marantz (1994) postulate as a Morphological Structure operation, is now subsumed by ordinary syntactic Merge of the verbal base and of the clitic constituents in the left periphery of the sentence. Thus the syntax-internal account of mesoclis eliminates an important redundancy between morphology and syntax. In the process it also eliminates the tucking in implied by the movement in (2) and the potential enrichment of the grammar that it represents. It was mentioned that negation, blocking enclisis in the imperatives, also blocks mesoclis, as illustrated in (3) for Caribbean Spanish and in (34a) below for *Senise*. The switching of clitics from the enclitic to the proclitic position in negative imperatives is generally interpreted as an indication that the verb does not move to the high C_1 position, due to the blocking effect of the negation (Rivero 1994, Roberts 1994). Suppose then that in negative contexts imperatives sit in the ordinary I position of inflected verbs. It evidently follows that all possible clitic positions are higher than the verb and clitics are forced to appear

to its left, as schematized in (34b). This excludes enclisis – and what in present terms is but a particular subcase of enclisis, i.e. mesoclis, establishing the desired link between the two phenomena.

- (34) a. nun m/ d u purtæ:tə *Senise*
 not me/him-her-them it-them bring.2pl
 ‘Don’t bring it/them to me/him/her/them’
 b. [NEG nun [CL m/d [CL u [I purtæ:tə

The matter of the parameters involved in mesoclis has so far been left largely implicit. Under the proposals of Halle and Marantz (1994) and of Harris and Halle (2005) the issue hardly arises. The infixation rule of the former and the metathesis rule of the latter are clearly conceived as language specific – so that they will simply be stated in the grammar of Caribbean Spanish but not of standard Spanish. Matters are not quite so simple if a syntactic level analysis is on the right track. This is because it is a basic property of current syntactic models that they do not have construction specific rules (Chomsky 1981) – nor is parametrization connected to operations of the computational components but rather to the properties of the lexical items they operate on (Chomsky 1995).

Let us consider *Senise* again, where mesoclis is possible both without copying of the inflection, as in (12)-(13) and with copying of it, as in (17) -- and it alternates with ordinary enclisis as in (14). Following again current syntactic theorizing we assume that true optionality does not exist in grammar – so *Senise* must be characterized by three (minimally) different grammars or, more properly, lexicons. In particular, the grammars with mesoclis can be characterized on the basis of a property of the D inflection – namely that of associating with the I (or at most the C) domain of the sentence. This result can be achieved in two ways in the language. One has the D element appearing both as a clitic(-like) constituent in the I domain and as part of the verbal constituent in C_I (copying); the other has it appearing only in the I domain (simple mesoclis). The no mesoclis grammar doesn’t have the relevant requirement, so that D appears only inside the verb (in C_I).

In fact, while in the discussion surrounding (30)-(32) we defined the conditions that make it possible for the agreement inflection to split from the verb base, we are now supplying the conditions that make this necessary. We would like to stress that in the simplicity metrics, the present syntax-internal view of parametrization appears to be remarkably simpler than the view of parametrization that would emerge from the adoption of rules such as (2) or (6)-(7). We therefore claim this as an important advantage of construing mesoclis as purely syntactic.

6. The clitic split(s)

The final empirical point raised in the discussion in section 2 had to do with the clitic hierarchy defined by clitic split in mesoclis. One of the objections that we raised against Harris and Halle’s (2005) treatment is that it does not provide a descriptively adequate characterization of the clitic hierarchy in (16) – let alone an explanation for it. The descriptive generalizations envisioned by Harris and Halle (2005) correlate the position of a clitic in the hierarchy with its inflectional class or with its degree of neutralization. A different generalization

is suggested by Kayne (2008) who correlates the sequence of clitics in (16) to their relative order in the critic string. As before, the question is whether this latter generalization holds – and if it holds why.

Let us consider descriptive adequacy first. The correlation obviously holds in Spanish; it furthermore holds for Italian varieties of the type of *Senise*, where as in most Romance languages, the accusative and partitive clitics in enclisis are also the lowest clitics of the string. Albanian varieties are more interesting. The basic order whereby datives and 1st/2nd person clitics precede the middle-passive clitic *u* is stable across Albanian; in (35a) we provide an example of it from the standard-like variety of *Gjirokastër*, while in (35b) we illustrate it in the Arbëresh variety of *Portocannone*. But then *S.Marzano*'s (11c) represent a counterexample to Kayne's (2008) generalization. For in *S.Marzano*, *u* is in mesoclisism and the dative in enclisis, reversing the basic order where the dative precedes *u*.

- (35) a. m/ i u θie gōta *Gjirokastër*
to.me/to.him MP broke the.glass
'The glass broke (on me/him)'
- b. m/ i u tʃa- x nə bukjer *Portocannone*
to.me/to.him MP break-MP a glass
'A glass broke (on me/him)'

More to the point, problems arise if we move from the correlation itself to the reasons why it should hold. Kayne (2008) suggests the obvious reason that 'Spanish *se* can move higher than *lo* to judge by clitic order. Plausibly this translates into *se* being able to move past *-n* more readily (cross-dialectally) than *lo* can'. Yet note that this explanation only removes the questions to a different level: namely, what determines clitic order? If the answer was simply that clitic order is randomly determined by each grammar, then we would not expect to find the remarkable regularities that we do find in, say, Romance and Albanian. We conclude that the explanation for (16) is not to be found in the correlation with any one fact concerning clitics – be it their position, as for Kayne (2008), their morphological makeup, as for Harris and Halle (2005), or other. Rather there is a common set of principles governing clitics from which all of these closely interwoven facts follow. It is directly at this set of principles that we aim in our work (Manzini and Savoia 1998 ff.).

Let us consider so-called 3rd person accusative clitics; recall that if only one clitic appears in enclisis (rather than in mesoclisism) it is a 3rd person accusative. Morphologically these clitics are characterized in both Romance and Albanian by the fact that they (or at least a subset of their allomorphs) bear differentiated nominal class morphology. In Manzini and Savoia (2002 ff.) we argue that nominal class morphology projects the N category, providing the overall N categorial signature of nouns¹¹. In this sense, we argue that the categorial signature projected by so-called 3rd person accusative clitics is N. We further argue that N properties are sufficient to satisfy the internal argument of a

¹¹ In this conception there is no *n* category in the sense of Marantz (1997). Recently Pesetsky (2008), argued for much the same, namely that N should be recognized as the category projected in the noun by particular morphological specifications.

selecting predicate. In short, N implies the presence of nominal class properties (at least in the languages under examination) and the satisfaction of the internal-argument-of relation.

If two clitics are isolated in enclisis (as opposed to other clitics in mesoclis), then they coincide with the 3rd person accusative (as above) and with the 3rd person dative. A fact related to this is that in Albanian and in several Romance languages so-called 3rd person datives are lexicalized by nominal class morphology (as in the case of Albanian *i*). Positionally as well, there is evidence from several Romance languages that datives occupy the same slot in the clitic hierarchy as accusatives – with which they are mutually exclusive. On the basis of this evidence Manzini and Savoia (2002 ff.) conclude that datives can also project N.

At the same time in Romance languages, when dative clitics display an actual syncretism with accusative clitics, the syncretic form of the accusative is always the plural. In Manzini and Savoia (2002 ff.) we take this an indication that there is some deeper quantificational(-like) property that plurals and datives share. This quantificational property Q (distributivity or other) can be projected by datives on the syntactic tree – in which case they can combine with accusatives in N and precede them. The partial order $Q > N$ is the same observed wherever quantificational properties are ordered with respect to nominal/ argumental properties.

The Q property of datives is at the core of perhaps the most famous syncretism/ suppletivism phenomenon in the Romance clitic system, namely the so-called Spurious *se* of Spanish, illustrated in connection with parasitic plurals in (21) – whereby the dative reading is associated with the middle-passive *se* clitic. The fact is that at least in the so-called impersonal reading of the middle-passive (Manzini 1986, Chierchia 1995, Manzini and Savoia 2002 ff.) *se* must be construed as a variable in the scope of quantificational closures (generic/ universal, existential) – hence it must be a Q clitic itself.

The other clitics present in the hierarchy in (16) are 1st/2nd person ones. In Romance and in Albanian their morphology and the category/ position they project on the syntactic tree depends only on their person denotation – in particular Case is irrelevant, leading them to overlap neither with 3rd person accusatives, nor with 3rd person datives. On the basis of this evidence Manzini and Savoia (2002 ff.) associate 1st/ 2nd person clitics a P(erson) category, here notated, more transparently, as 1/2P to which we assign a position higher than that of N clitics and lower than that of Q clitics.

The same area of the clitic hierarchy, higher than 3rd person accusatives and lower than *si*, is associated with the locative clitic – which is absent from Spanish, but appears in the examples from *Senise*, e.g. (13c). In Manzini and Savoia (2002 ff.) we conclude therefore that this intermediate area of the clitic hierarchy is connected with specifications pertaining to the universe of discourse (speaker, hearer, location). This yields the hypothesis in (36) on the organization of the clitic string.

(36) ... [Q [1/2P [Loc [N

We already stressed that the $Q > N$ ordering is reflected in the internal organization of the noun phrase; similarly in the noun phrase, demonstratives (essentially a part of the locative system of natural languages) appear

immediately above N and below quantificational specifications (Brugè 1996, Bernstein 1997). Finally, languages like *Senise* also differ from Spanish in having a partitive clitic. This is in complementary distribution with the accusative and connected like it to internal argument specifications. We conclude therefore on this basis and on the basis of the fact that it follows all clitics with which it cooccurs that it is associated with the same N position as the accusative clitic.

Within the framework defined by the hierarchy in (36), Manzini and Savoia (2004a ff.) propose that the basic clitic split opposes what they call discourse-anchored and event-anchored categories. The core cases of discourse-anchored clitics are 1st/2nd person clitics and locatives, which appear in mesoclisys where splits are attested. The core cases of event-anchored clitics are accusatives and partitives, connected with the internal argument specifications. These are in enclisis where splits occur.

Datives can behave as discourse-anchored elements, as in *Senise* where datives are in mesoclisys, or as event-anchored elements, as they do in *S.Marzano*, where they are enclitic like accusatives. There is a good correlation between this oscillation of datives and the fact that on the one hand, as noted by Harris and Halle (2005), they appear to have the same (invariable) inflectional properties as *se* and 1st or 2nd person clitics – while on the other hand these properties enter in a larger inflectional system for *l* bases including accusatives. Extricating the underlying intuition from the technicalities of its implementation we could say that depending on how one looks at them, dative inflectional properties class them together with accusatives or with 1st/2nd person clitics. A similar oscillation can be seen in the position datives project. Thus they can take the same low N slot as accusatives or a higher Q slot which puts them in the deictic/ quantificational area of the hierarchy.

The middle-passive clitic *si/ u* is equally interesting. Its variable denotation, requiring quantificational closure (generic or other) evidently puts it into the discourse-anchored set – so that it will systematically appear in mesoclisys. In fact, if there are languages where, as Harris and Halle (2005) state, the mesoclisys position selects *se*, then the relevant split may specifically target quantificational properties (as a subcase of discourse-anchored ones). The fact that *u* appears lower than datives and 1/2P clitics in Albanian examples like (35) need not be in contradiction with its appearance in mesoclisys – since properties other than its variable status may be relevant for its projection of a position in the string in (36). One possibility is that *u* in lexicalizing middle-passive voice in Albanian, targets internal argument specifications (like the accusative with which it is in complementary distribution) – and therefore sits in the low N position in the string.

Strong evidence that what determines the mesoclisys/ enclisis split is not the morphophonological shape of the clitics involved but rather their interpretation is provided by examples (13b), (13d) and (13e) of *Senise*. Thus *nə* is mesoclitic when it has person reference, i.e. is discourse-anchored in present terms and enclitic when it is a partitive, i.e. event-anchored in present terms¹².

¹² A different question is why the partitive and the 1st person plural reading should be syncretic. We already mentioned in fn. 7 that an account of syncretisms in the Romance clitic systems is provided by Manzini and Savoia (2005, 2007, to appear a) in terms compatible with the present assumptions. The Late Insertion model of Distributed Morphology assumes that syncretism represents the emergence of the unmarked. On the contrary we propose that syncretisms

Patterns where clitic clusters split between enclisis and proclisis, as in *Greci*'s (32) or in *Shkodër*'s (33), can be accounted for along the same lines outlined for mesocclisis. In other words our treatment captures the desired continuity between phenomena such as mesocclisis, conventionally of a morphological nature, and phenomena such as enclisis/ proclisis alternations, conventionally taken to be syntactic in nature. The characteristics that differentiates *Shkodër* from other languages considered is that it does not allow for the splitting of clitic clusters. Yet the sensitivity to the opposition between discourse-anchored and event-anchored referents translates into different placements for clitic groups according to whether they do or do not contain a discourse-anchored clitic. Clusters containing such a clitic appear in a higher domain than those not containing it.

Harris and Halle (2005), even assuming they could distinguish correctly the various sets in (16), could not explain why they map to enclisis and mesocclisis in the way observed, as opposed to, say, the reverse. Kayne's (2008) proposal, based on the correlation with clitic order, can predict the particular way in which the clitic split maps to mesocclisis vs. enclisis – except that it begs the question of what determines clitic order in the first place. Because of this, it also meets some empirical problems, since sometimes clitic order and clitic splits go separate ways, as in *S.Marzano*.

Under the present proposal, the fundamental clitic split is between discourse-anchored and event-anchored denotations. What is more, mesocclisis and enclisis are just descriptive terms for the positioning of clitics in the I inflectional domain and in its C modal domain. Taken together, these two conclusions imply a correlation between event-anchored clitics and the inflectional I domain on the one hand (enclisis) and between discourse-anchored clitics and the modal C domain on the other (mesocclisis/ proclisis). This schema is more general than the data at hand and ought to find applications well beyond them; indeed Manzini (2009) provides a possible application of it to the interaction of clitics and clitic copying with the negation.

7. Summary and conclusions

The empirical focus of this paper was relatively narrow, concerning phenomena of mesocclisis (with and without copying of the inflection and/or the clitics) in imperatives of Romance and Albanian. Despite its narrowness the phenomenon has an obvious theoretical interest in that it presents a case of (apparent) reordering of morphological level and syntactic level constituents with one another. Corresponding to this, treatments are available for the phenomenon at no less than three different levels of organization of the grammar, namely Morphological Structure (Halle and Marantz 1994), the phonology (Harris and Halle 2005) and the syntax (Manzini and Savoia 1999 ff. – also Kayne 2008). The first aim of this article has been to show that morphological and phonological analyses present problems sufficient to warrant the exploration of the third major possible solution – namely the syntactic one.

correspond to the existence of lexical items ambiguous between different readings at the LF interface – based on the positively specified properties of such items. An idea of how this works in practice is provided by the treatment of Spurious *se* sketched here in the discussion introducing (36).

In fact, if we are correct, a syntax-internal treatment for mesocclisis is advantageous for both theoretical and empirical reasons. In the Distributed Morphology treatment it remains mysterious why Morphological Structure would have a re-merge rule – in part redundant with the syntactic rule of movement and in part more powerful than it (allowing for downward movement). In the phonological treatment it remains mysterious why the phenomenon is entirely constrained by morphosyntactic level constituency. A syntactic level treatment solves automatically the second problem – while also eliminating the need for syntactic-like rules in the morphology.

Some of the main empirical facts to be explained, as noted and discussed by Harris and Halle (2005), are why mesocclisis occurs only in contexts where enclisis can also occur (section 1); and why in instances where some clitics are in enclisis and some in mesocclisis the split is not random, but follows a certain clustering of clitics (section 2). Other generalizations we noted are that mesocclisis phenomena single out agreement inflections and that the doubling of inflectional material has a parallel in the doubling of the clitics themselves (section 2).

We argued that a syntactic level analysis is needed to deal with the doubling of clitics, involving in particular the postulation of two different domains for clitic insertion (section 4). Mesocclisis corresponds to the higher domain of insertion and enclisis to the lower domain (section 5). Neither morphophonological information (Harris and Halle 2008) nor a pure correlation with the relative position of clitics (Kayne 2008) are sufficient to explain the true nature of the observed splits – which require a full theory of clitic categorization (section 6). In mesocclisis, the agreement inflection is itself analyzed as a nominal clitic constituent (a ‘subject clitic’) – which explains why non-agreement inflection do not give rise to mesocclisis (section 5).

If a syntactic analysis is at all feasible, then there is a serious possibility that some reordering of morphological-level and syntactic-level constituents is not performed by morphological readjustment rules or Spell-Out rules – but by core syntax. This has potential implications for the architecture of grammar as a whole, which should be taken into account by the theoretical debate.

References

- Benincà P. (1999) Between Morphology and Syntax: On the verbal morphology of some Alpine dialects. In L. Mereu (Ed.) *Boundaries of morphology and syntax*, (pp. 11-30). Benjamins, Amsterdam.
- Bernstein J. (1997) Demonstratives and reinforcers in Germanic and Romance languages. *Lingua* 102, 87-113.
- Brugè L. (1996) Demonstrative movement in Spanish: A comparative approach. *Working Papers in Linguistics*, Università di Venezia, 6.1, 1-53.
- Chierchia G. (1995) Impersonal Subjects. In E. Bach, E. Jelinek, A. Kratzer, & B. H. Partee (Eds.) *Quantification in natural languages*, (pp. 107-143). Dordrecht: Kluwer.
- Chomsky N. (1981) *Lectures on Government and Binding*. Dordrecht: Foris.
- Chomsky N. (1995) *The Minimalist Program*. Cambridge Mass: The MIT Press.
- Halle M. (2008) Reduplication. In R. Freidin, C. Otero, & M.L. Zubizarreta (Eds.) *Foundational Issues in Linguistic Theory*, (pp. 325-357). Cambridge, Mass: The MIT Press.

- Halle M., and A. Marantz (1993) Distributed morphology and the pieces of inflection. In K. Hale, S. J. Keyser (Eds.) *The view from Building 20*. Cambridge, Mass.: The MIT Press.
- Halle M., and A. Marantz (1994) Some Key Features of Distributed Morphology. In A. Carnie, H. Harley, & T. Bures (Eds.) *Papers on Phonology and Morphology*, MIT Working Papers in Linguistics 21, 275-288.
- Harris J. (1994) The syntax-phonology mapping in Catalan and Spanish clitics. In A. Carnie, H. Harley, & T. Bures (Eds.) *Papers on Phonology and Morphology*, MIT Working Papers in Linguistics 21.
- Harris J. and M. Halle (2005) Unexpected plural inflections in Spanish: Reduplication and Metathesis. *Linguistic Inquiry* 36, 195-222.
- Harrison K.D. and E. Raimy (2004) Reduplication in Tuvan: Exponence, Readjustment and Phonology. In A. Csirmaz, Y. Lee, & M. A. Walter (Eds.) *MIT Working Papers in Linguistics* 46. Proceedings of the Workshop on Altaic Formal Linguistics (WAFL) 1.
- Kayne R. (1991) Romance Clitics, Verb Movement and PRO. *Linguistic Inquiry* 22, 647-686.
- Kayne R. (1994) *The antisymmetry of syntax*. Cambridge, Mass: The MIT Press.
- Kayne R. (2006) Expletives, Datives and the Tension between Morphology and Syntax. Ms. on line, New York University.
- Kayne, R. (2008) Toward a Syntactic reinterpretation of Harris and Halle (2005). Handout, *Going Romance*, Groningen December 12 2008.
- McCarthy J., and A. Prince (1995) Faithfulness and reduplicative identity. In J. Beckman, L. Dikey, & S. Urbanczyk (Eds.), *UMASS Occasional papers* 18, 249-384.
- Manzini M.R. (1986) On Italian *si*. In H. Borer (Ed.) *The Syntax of Pronominal Clitics, Syntax and Semantics* vol. 18, (pp. 241-262). New York: Academic Press.
- Manzini M.R. (2008) Doubling by clitics and doubling of clitics: The case of negation. In S. Barbiers (Ed.), *Microvariation in Syntactic doubling*, Emerald Group Publishers
- Manzini M.R., A. Roussou, & L.M. Savoia (to appear) The morphosyntax of non-active voice in Greek and Albanian. In S. Ozsoy (Ed) *Proceedings of the Mediterranean Syntax Meeting 2*, Istanbul.
- Manzini M.R., and L. M. Savoia (1998) Clitics and auxiliary choice in Italian dialects: Their relevance for the Person ergativity split, *Recherches linguistiques de Vincennes*, 27, 115-138.
- Manzini M.R., and L.M. Savoia (1999) The syntax of middle-reflexive and object clitics: a case of parametrization in arbëresh dialects. In M. Mandalà (Ed.) *Studi in onore di Luigi Marlekaj*, (pp. 283-328). Bari: Adriatica.
- Manzini M.R., and L.M. Savoia (2002) Clitics: Lexicalization patterns of the so-called 3rd person dative. *Catalan Journal of Linguistics*, 1, 117-155.
- Manzini M.R., and L.M. Savoia (2004a) The nature of the agreement inflections of the verb. *MIT Working Papers in Linguistics*, 47, 149-178.
- Manzini M.R., and L.M. Savoia (2004b) Clitics: Cooccurrence and mutual exclusion patterns. In L. Rizzi (Ed.) *The structure of CP and IP*, (pp. 211-250). Oxford: Oxford University Press.
- Manzini M.R., and L.M. Savoia (2005) *I dialetti italiani e romanci. Morfosintassi generativa*. Alessandria, Edizioni dell'Orso, 3 vols.

- Manzini M.R., and L.M. Savoia (2007) *A unification of morphology and syntax. Studies in Romance and Albanian varieties*. London, Routledge.
- Manzini M.R., and L.M. Savoia (2008a) Uninterpretable features are incompatible in morphology with other minimalist postulates. In R. Freidin, C. Otero, & M.L. Zubizarreta (Eds.), *Foundational Issues in Linguistic Theory*, (pp. 43-72). Cambridge, Mass: The MIT Press.
- Manzini M.R., and L. M. Savoia (2008b) *Worknotes on Romance morphosyntax - Appunti di morfosintassi romanza*, Alessandria, Edizioni dell'Orso.
- Manzini M.R., and L.M. Savoia (2008c) Non-active voice in Albanian: Implications for the theory of movement. In Savoia (2008).
- Manzini M.R., and L.M. Savoia (2009) Morphology dissolves into syntax: Infixation and Doubling in Romance languages. *Annali Online di Ferrara - Lettere* 1: 1-28.
- Manzini M.R., and L.M. Savoia (to appear a.) Syncretism and suppletivism in clitic systems: underspecification, silent clitics or neither? In R. D'Alessandro, A. Ledgeway, and I. Roberts (Eds.) *Syntactic variation: The dialects of Italy*. Cambridge: Cambridge University Press.
- Manzini M.R., and L.M. Savoia (to appear b.) *Grammatical Categories*. Cambridge: Cambridge University Press.
- Marantz A. (1982) Re reduplication. *Linguistic Inquiry* 13, 435-482.
- Marantz A. (1997) No Escape from Syntax: Don't Try Morphological Analysis in the Privacy of Your Own Lexicon. In A. Dimitriadis, L. Sieger, Cl. Surek-Clark, & A. Williams (Eds.) *Proceedings of the 21st Annual Penn Linguistics Colloquium*, (pp. 201-225). U. Penn Working Papers in Linguistics 4.
- Pesetsky D. (2008) Russian Case morphology and the syntactic categories. Handout, *Mediterranean Syntax Meeting – II*, Bogazici University, Istanbul, 16 October.
- Poletto C. (2000) *The Higher Functional Field*. Oxford: Oxford University Press.
- Raimy E. (2000) *The morphology and phonology of reduplication*. Berlin: Mouton de Gruyter.
- Rizzi L. (1997) The fine structure of the left periphery. In L. Haegeman (Ed.) *Elements of grammar*, (pp. 281-337). Dordrecht: Kluwer.
- Rivero M.-L. (1994) Negation, imperatives and Wackernagel effects. *Rivista di Linguistica* 6, 39-66
- Roberts I. (1994) Two Types of Head Movement in Romance. In N. Hornstein, & D. Lightfoot (Eds.) *Verb Movement*, Cambridge: Cambridge University Press.
- Savoia L. M. (2008) *Studi sulle varietà arbëreshe*. Università degli Studi della Calabria, Rende.
- Savoia L. M., & M.R. Manzini (to appear) Lexicalization of 3rd person object clitics: clitic enclisis and clitic drop. In R. D'Alessandro, A. Ledgeway, & I. Roberts (Eds.) *Syntactic variation: The dialects of Italy*. Cambridge: Cambridge University Press.
- Sportiche D. (1996) Clitic constructions. In J. Rooryck, & L. Zaring (Eds.) *Phrase structure and the lexicon*, (pp. 213-276). Dordrecht: Kluwer.