

# Romance clitics: cluster formation and allomorphy

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## 1. Introduction

The syntactic distribution of clitic elements in Romance depends on parameters like finiteness (for instance, in many languages clitics are postverbal with non-finite tenses), or clause typing (for instance, in many northern Italo-Romance varieties subject clitics are placed postverbally if the sentence is interrogative or exclamative)\*. Combinations of two or more clitics, on the other hand, are not fully transparent to syntactic principles. In particular, the order of elements within the cluster and the morphological shape of the resulting compound cannot be derived straightforwardly via syntactic computation.

For instance, in a language like French in (1a), object clitics follow the same order of lexical arguments, namely, accusative > dative, while in others, like Italian in (1b), they exhibit the mirror order dative > accusative.

- (1) a. Jean le lui donne  
Jean it to.him/her gives  
'Jean gives it to him/her'
- b. Gianni glie lo regala.  
Gianni to-him/her.CL it.CL gives  
'Gianni gives it to him/her'

In addition, certain combinations are morphologically opaque. In Italian, for instance, when the reflexive clitic *si* in (2a) combines with the impersonal *si*, e.g. (2b), the resulting cluster does not correspond to a transparent sequence of two *si*'s, but the leftmost element of the cluster is replaced by the clitic *ci*, as shown in (2c).

- (2) a. Carlo si lava ogni giorno  
Carlo himself.CL wash.3.SG everyday  
'Carlo washes everyday'
- b. La macchina si lava ogni giorno.  
The car.OBJ one.CL wash.3.SG everyday  
'The car is washed everyday'
- c. Ci/\*si si lava ogni giorno.  
Himself/herself/themselves.CL one.CL wash.3.SG everyday  
'You wash everyday'

Grimshaw 1997, 2000, Maiden 2000, Pescarini 2010 among many others have argued that opacity normally follows from a dissimilation principle preventing the adjacency of identical clitic exponents. This principle accounts straightforwardly for systematic gaps like the one exemplified in the following set of Italian sentences, where the locative

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\* I am grateful to Anna Cardinaletti for helpful discussion of this material. This work is part of the FIRB project 'A grammatical survey of Italian dialects: fieldwork, data management, and linguistic analysis' (RBFR08KR5A).

pronoun *ci* can combine with any personal pronoun except for the homophonous 1pl clitic, ex. (3c):

- (3) a. mi ci porta Micol.  
me.CL there.CL brings Micol  
'Micol brings me there'
- b. ti ci porta Micol.  
you.sg.CL there.CL brings Micol  
'Micol brings you there'
- c. ci (\*ci) porta Micol.  
us.CL there.CL brings Micol  
'Micol brings us there'.
- d. vi ci porta Micol.  
you.pl.CL there.CL brings Micol  
'Micol brings you there'

In other cases, however, morphological opacity cannot result from a ban on the co-occurrence of identical clitics. This is particularly true in the case of sequences formed by a 3<sup>rd</sup> person dative followed by a 3<sup>rd</sup> person accusative clitic. In this context, the exponent which normally expresses the 3p dative clitic (in round brackets in the following examples) must be replaced by another item, which is subject to cross-linguistic variation.

- (4) a. Glie /\*le lo presto.  
Italian  
To-her.CL it.CL lend.1.SG  
'I lend it to her'
- b. Juan se/\*le lo comprò.  
Spanish  
Juan to-him/her.CL it.CL bought  
'Juan bought it for him/her/them'
- c. cə (\*i) u da.  
Poggio  
Imperiale, Southern Italy  
to-him.CL it.CL give.3.SG  
(Manzini & Savoia 2005:  
135-138)  
'He gives it to him'

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It is worth noting that this pattern – which cannot be due to a trivial dissimilation principle – is regularly attested in a consistent set of Romance languages. In particular, this irregularity is found in those languages in which the clusters of 3p clitics display the mirror order (like Italian in (1b)), while these combinations are normally transparent in those languages, like French in (1a), in which the dative clitic occupies the rightmost position in the cluster.

In what follows, I will argue that this correlation between clitic-order phenomena and morphological irregularities can receive a principled explanation if we assume – following Kayne 1994:19-21 and Cardinaletti 2008 – that sequences of clitic items can be either *split* or *cluster* in a stricter sense. According to Kayne 1994: 19-21, two clitics  $\alpha$ ,  $\beta$  can combine into either a "split" configuration like (5a), where clitics occupy distinct

syntactic projections, or a “cluster” configuration like (5b), in which the leftmost clitic moves from a lower position and left adjoins to the higher clitic.

- (5)    a        [ α [ β ] ]  
          b.      [ β α [ tβ ] ]

The hypothesis put forth by Cardinaletti 2008 is that morphological irregularities emerge in the latter type of cluster. In what follows I support Cardinaletti’s analysis and argue for a finer account of the morphological irregularities displayed in Romance clitic combinations. In section 2 I summarize Cardinaletti’s proposal; in section 3 I address a pattern of allomorphy in Italian and, finally, in section 4 I focus on a pattern of suppletivism that targets combinations of 3p clitics in various Romance languages.

## 2. Cardinaletti 2008: on different types of clitic clusters

Cardinaletti 2008 argues that, in Italian (and, arguably, in Romance), there are several types of clitic clusters. Her classification is based on the following diagnostics:

- i. distributional gaps: certain clusters are not allowed in enclisis.
- ii. vowel change: in certain clusters of Italian, the vowel of the leftmost clitic is *-e-* instead of the expected *-i-*.

With respect to the former parameter, Italian displays two types of clusters: those which can occur both in enclisis and in proclisis, (6) and (7), vs those which cannot occur in enclisis, (8). Cardinaletti argues that this asymmetry results from the underlying syntactic configuration as she assumes that split sequences are not allowed in enclisis.

Furthermore, unrestricted clusters can be divided into two sub-classes: one formed by clusters with vowel change vs another in which the two clitics are combined transparently.

The resulting taxonomy is as follows:

Type1: unrestricted clusters with vowel change, in (6);

Type2: unrestricted clusters without vowel change, in (7);

Type3: clusters which are allowed only in proclisis, in (8).

- |     |   |  |
|-----|---|--|
| (6) | a. Mi ha dato un libro.<br>[he] to-me has given a book  | a'. Mi ha dato tre libri.<br>[he] to-me has given three books        |
|     | b. Me lo ha dato.<br>[he] to-me it has given  | b'. Me ne ha dati tre.<br>[he] to-me of-them has given three         |
|     | c. Pensa di darmelo.<br>[he] thinks to give to-me it  | c'. Pensa di darmene tre.<br>[he] thinks to give to-me of-them three |
|     | d. Dammelo!<br>give to-me it  | d'. Dammene tre!<br>give to-me of-them three                         |
| (7) | a. Mi / Ti / Vi ci metterà.<br>[he] me / you:SG / you:PL there will-put   |  |
|     | b. Pensa di mettermici / mettertici / mettervici.<br>[he] thinks to put me / you:SG / you:PL there                            |  |
| (8) | a. Non mi/ti/vi/gli/le si parlò con la dovuta attenzione.<br>not to-me/you:SG/you:PL/him/her IMP spoke with the due attention |  |

- b. \*Non sembra esser=mi/ti/vi/gli/le=si parlato con la dovuta attenzione.  
 [it] not seems [to] have=to-me/you:SG/you:PL/him/her=IMP spoken with the  
 due attention

Possibly, the conclusion that Type2 combinations are clusters *stricto sensu* is too strong because, unlike Type1 combinations, they can be split in restructuring contexts, as shown in (9c,d), see also Pescarini (2012).

- (9) a. **Ti ci** può portare lui  
 You there can bring he
- b. può portar=**ti=ci** lui  
 can bring=you=there he
- c. %**ti** può portar=**ci** lui<sup>1</sup>  
 You can bring=there he
- d. %**ci** può portar=**ti** lui  
 There can bring=you he  
 'he can bring you there'

However, leaving Type2 combinations aside, Cardinaletti's claim that Type1 clusters correspond to a single morphosyntactic constituent can shed light on several morphological aspects which will be addressed in the following sections.

### 3. The -i/e- alternation revised

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As previously mentioned, Italian shows a context-driven alternation targeting the leftmost clitic of certain clusters: before a 3p accusative clitic (e.g. *lo* 'him', *la* 'her'), or the partitive *ne* ('of it/them'), clitics end with *-e* instead of the expected *-i*. For instance, the clitic *mi* '(to) me' becomes *me*, see (10a), and the 3p m.sg clitic *gli* becomes *glie* /ʌe/, (10b).

- (10) a. [me] lo porti [\*mi]  
 to.me it bring.you  
 'You bring it to me'
- b. [ʌe] ne porti due [\*ʌi]  
 to.him of.it bring.you two  
 'You bring him two of it'

This pattern has received a good deal of attention at least since D'Ovidio (1886:71), who argues that *-e-* is a reflex of the etymological initial vowel of the second clitic (*e*)*lo* < ILLUM, (*e*)*ne* < INDE. According to this reconstruction, the derivation of the clusters above is as follows:

- (11) a.ME ŸLLUM > M'ILLU > me lo 'it/him to me'

<sup>1</sup> The % marker means that the grammaticality of the constructions is subject to variation. In particular, informants usually accept (9c,d) when the sentence is uttered in a plausible context. On the contrary, when I tried to elicit grammatical judgments by means of a written questionnaire, the same construction was often judged ungrammatical.

|              |            |   |        |                     |
|--------------|------------|---|--------|---------------------|
| b. ĪLLI ĪNDE | > ĪLL'ĪNDE | > | gliene | 'it/him to him/her' |
|--------------|------------|---|--------|---------------------|

This solution provides a clear and elegant account of both the etymology of *-e-* and its synchronic distribution. However, D'Ovidio's analysis – see also Meyer Lübke 1890, 1894, 1901 – has three major drawbacks.

First, if *-e-* was the reflex of ī (< ILLE, INDE), the resulting cluster would show a geminate sonorant, as in Florentine etymological geminates are normally maintained. The regular evolution would therefore be as follows:

|                  |             |            |                     |
|------------------|-------------|------------|---------------------|
| (12) a. ME ĪLLUM | > M'ĪLLU    | > *mello   | 'it/him to me'      |
| b. ĪLLI ĪLLUM    | > ĪLL'ĪLLUM | > *gliello | 'it/him to him/her' |

Second, as Parodi (1887:189-190) pointed out, in the 13<sup>th</sup> century, reflexes of ILLE, INDE, occupy the leftmost position of the cluster, as shown by the following examples, and, crucially, do not show traces of either gemination or initial *e-* (e.g. \*ella mi):

|  |                           |
|--|---------------------------|
| (13) a. che [...] voi <b>la mi</b> concede     | (Boccaccio, Filocolo 212) |
| that [...] you.pl it.f to.me grant.subj        |                           |
| 'that you grant it to me'                      |                           |
| b. io <b>lo vi</b> dirò.<br>(Novellino, p.128) |                           |
| I it ti.you tell.fut                           |                           |
| 'I will tell it to you'                        |                           |

The fact that the archaic order of these clusters is accusative > dative contradicts D'Ovidio's hypothesis that the linking vowel *-e-* is a reflex of preserved ī in cluster-internal position. Rather, *-e-* is an innovation emerging as soon as dative clitics begin to occupy the leftmost position of the cluster (Melander 1929). This means that there is a strong correlation between the syntactic change leading to the order in (13b) and the phonological one determining the change from *-i* to *-e*.

Third, the apocopated allomorph *l'* (< *lo*) resyllabifies by means of the prosthetic vowel *i-*, namely *l' → il* (Vanelli 1992/1998, Renzi 1993, Renzi & Vanelli 1993). If the etymological *e-* (< ī-) had been still underlying, the insertion of a prosthetic segment like *i-* would have been unnecessary.

The alternative hypothesis is that clitic clusters form an autonomous prosodic constituent, and that this pattern of allomorphy is a side-effect of this exact prosodic configuration. In particular, Cardinaletti claims that Type1 clusters are phonological words<sup>2</sup> (see also Monachesi 1996), although this hypothesis is not supported by any conclusive evidence and, ultimately, it does not account for the *e/i* alternation.

<sup>2</sup> On the contrary, Cardinaletti 2008 argues that type2 clusters e.g. *ci si* form a syntactic constituent, but are not phonological words and, as a consequence, they do not display vowel change. According to Cardinaletti 2008, this observation is supported by the fact that *ci si* is never subject to [s]-sonorization, a PrW-internal process typical of northern speakers:

(i) ci [s]i va \*[z]  
'there IMP goes'  
'One/we go(es) there'

In my opinion, however, this conclusion is quite weak. In fact, it is worth noting that voicing is not allowed when [s] is in morpheme-initial position (Nespor & Vogel 1986:124-129), for instance, after prefixes like *a*, *anti*, *pre* (in particular when the prefix is transparent):

(ii) a. a-[s]ociale \*[z] 'asocial' (northern Italian)  
b. anti-[s]oldato \*[z] 'anti-soldier'

The only evidence that Type1 clusters form a prosodic constituent is that they are pronounced with a long vowel: [me:lo], [te:lo], but this observation is consistent with an alternative hypothesis, more restrictive than Cardinaletti's, that clusters might correspond to a smaller prosodic unit – the Foot – as argued by Peperkamp 1995, 1996, 1997. The hypothesis that clitic clusters are Feet, rather than phonological words, is consistent with the pattern of several southern Italian dialects like Neapolitan (Bafile 1992, 1994), in which the penultimate pronoun of enclitic clusters is stressed, as shown in (14b), while proclitic clusters are never stressed:

- (14) a. pòrta-**tə** na bbirrə single enclitic  
 (Neapolitan)  
 bring.to.youself a beer  
 'bring a beer for youself'
- b. pòrta-**té-nnə** assaj enclitic cluster  
 bring-to.yourself-of.it a.lot.of  
 'bring a lot of it (beer) for youself'
- (15) a. **tə** pòrtə na bbirrə single proclitic  
 (Neapolitan)  
 to.you bring.I a beer  
 'I bring you a beer'
- b. **tə nə** pòrtə assaj proclitic cluster  
 to.you of.it bring.I a.lot.of beer  
 'I bring you a lot of it (beer)'

This pattern is consistent with the prosodic hierarchies in (16), in which the leftmost clitic of the cluster corresponds to the penultimate syllable of the outer PrW and can therefore receive stress<sup>3</sup>. Proclitic clusters, on the contrary, do not occupy a PrW-final position and, as a consequence, cannot be assigned stress.

- (16)                   \*
- \*
- a. [[(por.ta)]<sub>PrW</sub> (te-nnə)]<sub>PrW</sub> enclitic cluster
- \*
- \*
- b. [(te-nnə) [(por.ta)]<sub>PrW</sub>]<sub>PrW</sub> proclitic cluster

However, even if we adopt the plausible hypothesis that clusters are feet, this is not *per se* an explanation of the -e/i- alternation. In order to account for this phenomenon, we have to focus on the morpho-phonology of Old Italian, in which, according to Rohlfs 1966:178,

c. pre-[s]elezione                           \*[z]                           'preselection'  
 On the basis of (ii), it seems to me that [s] voicing cannot be considered a test to ascertain whether *ci si* is a PrW or not. Rather, on the basis of the data in (9c,d), I argue that the difference between Type1 (e.g. *glielo*) and Type2 clusters (e.g. *ci si*) is syntactic in nature, rather than phonological: following this analysis, the cluster *ci si* exhibit the vowel *-i-* because it is split in the Syntax (see also Pescarini 2012), while the prosodic status of Type2 clusters, on the contrary, is still an open question, because [s] voicing is not a reliable test.

<sup>3</sup> Neapolitan, unlike Italian, assigns stress to the outer PrW, namely, the PrW which contains the clitic clusters. For a thorough analysis of the data, the interested reader is referred to Peperkamp 1995, 1996, 1997.

final unstressed *-e* optionally became *-i*, giving rise to a series of alternations like *avante > avanti* 'before, in front of', *diece > dieci* 'ten', *longe > lungi* 'far', etc. Such a raising ended up differentiating the morphology of clitic pronouns (e.g. *mi, ti* 'me, you') from the one of their stressed counterparts, which still maintain the vowel *-e* of ME, TE, INCE, SE.

If so, Type1 clusters trigger foot formation and, as a consequence the raising rule is blocked because the leftmost clitics becomes the foot's head. In this position, the vowel *-e-* is therefore expected to surface instead of *-i-*, which is found in weak syllables.

This hypothesis encounters a counterexample as the *-i/e-* alternation targets also the 3p dative clitic *gli* 'to him/her' < ILLI, although in this case *-e-* cannot be a reflex of the original ending. Since the original ending of the dative clitic is *-i*, we would expect *\*gilio, \*gline*, instead of *glielo, gliene* (pron. /ʎelo/, /ʎene/, cf. (10b)). Crucially, Old Italian is consistent with this prediction, as in the earliest documents the 3p dative clitic exhibits also the linking vowel *-i-*, as shown in (17), see also Cardinaletti 2010:444ff. Only in a later stage, the linking vowel of these clusters has become *-e-*, possibly in analogy with the morphology of the other clusters.

- (17) a. che **gli le** demo p(er) una inpossta (LibrAmmBIR<sup>4</sup>)  
 that to.him them gave.1pl for a tax  
 'that we gave them to him for a tax'
- b. ché **gli ne** potrebbe troppo di mal seguire (Boccaccio, Dec. III, 3, p. 197)  
 because to.him of.it could too.much of bad(luck) follow  
 'because it could cause him too much misfortune'

In conclusion, the data above are consistent with Cardinaletti's view that Type1 clusters correspond to a single autonomous constituent both in the Syntax and in the Phonology. Following Kayne 1994, we can argue that this type of combinations is due to the incorporation of the dative clitic onto the accusative one and, following Peperkamp 1995, 1996, 1997, we can argue that Type1 clusters give rise to foot formation which in turn trigger the *-e/i-* alternation as a side effect of secondary stress. The other clitic combinations, on the contrary, are split in the syntax, do not undergo foot formation and, ultimately, were subject to vowel raising.

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### 3.1. An aside on the morphology of P+D combinations

The above analysis, which relies on a desirable Syntax/Prosody isomorphism, can be weakened if other types of clitic clusters are taken into consideration. Cardinaletti 2008, in fact, notices in fact that Type1 clusters "display the same vowel that is found in the combinations of preposition and determiner such as *in + il > nel* 'in the' or *di + il > del* 'of the'".

This remark, however, is highly undesirable as it ends up contradicting Cardinaletti's own analysis. In fact, P+D sequences cannot be clusters *strictu sensu* (*à la* Kayne 1994) as the linear order P > D cannot be due to movement of P° past D°. Hence, if we want to maintain Cardinaletti's analysis of clitic clusters, we have to demonstrate that the underlying structure of Type1 clusters differs neatly from the one of P+D sequences.

Italian provides evidence in favour of such a distinction. Recall that the *-e-* of Type1 clusters cannot be considered the reflex of *í* (< ILLE, INDE), otherwise the resulting cluster would show a geminate sonorant:

<sup>4</sup> Libro d'amministrazione dell'eredità di Baldovino Iacopi Riccomanni (La prosa italiana delle origini: I, Testi toscani di carattere pratico, a cura di Arrigo Castellani, Bologna, Pàtron, 1982, pp. 429-64 [testo pp. 433-64].)

- (18) a. ME ŸLLUM > M'LLU > \*mello 'it/him to me'  
 b. ŸLLI ŸLLUM > ILL'LLUM > \*gliello 'it/him to him/her'

It is worth noting that P+D sequences, unlike pronominal clusters, are geminated and, following Formentin (1996), at least in some cases, this gemination must be a regular reflex of the *univerbation* of two separate though adjacent heads:

- (19) a. DE ŸLLUM > D'LLU > dello 'of the'  
 b. IN ŸLLUM > (I)N'LLUM > nello 'in the'

On the basis of the asymmetry between (18) and (19), we can conclude that the -e- of Type1 clusters can be considered a clue of incorporation, while in P+D sequences -e- is a regular reflex of Ÿ.

#### 4. Suppletivism

In many Romance varieties, the 3p dative clitic is replaced by a suppletive exponent when it is clustered with another clitic element. As shown in (4), this normally happens in Type1 clusters. We can distinguish at least three main patterns of substitution on the basis of the etymology of the replacing item:

i. spurious *se* patterns, attested in Ibero-Romance and Campidanese Sardinian: in true clusters the etymological 3p dative *le/li* is replaced by the 3p reflexive element (with a non-reflexive interpretation).

- (20) a. **di** pottu unu libru. (Sarroch, Campidanese Sard.)  
 to-him.CL bring.1.SG a book  
 'I bring him a book'  
 b. **si/\*di** qdu pottu.  
 to-him.CL it.CL bring.1.SG  
 'I bring it to him'

ii. spurious locative patterns, attested in many Italo-Romance dialects, Logudorese Sardinian and Catalan (also in colloquial French, cf. (22)): in true clusters the etymological 3dat *le/li* is replaced by the locative clitic *ci/bi/hi/y*.

- (21) bi/\***li** l'appo datu (Log. Sardinian, Jones 1993:220)  
 to.him/her/them it have.1.sg given  
 'I gave it to him/her/them'

- (22) %Donne-z-y-en (colloquial French)  
 Give-[z]-there-of.it  
 'Give him some of it!'

iii. spurious *ne* patterns (several southern Italian dialects): in true clusters the etymological 3dat *le/li* is replaced by the partitive element deriving from Lat. INDE.

- (23) a. **i** da kkuistə (Rocca Imperiale, CS, Southern Italy  
 to.him/her/them gives this Manzini & Savoia 2005: 291)  
 'He/she gives this to him/her/them'

- b. **n/\*i u da**  
 to him/her/them it gives  
 'He/she gives it to him/her/them'

Following Cardinaletti (2008), this phenomenon regards the 3p dative clitic because it is *bimorphemic* (Kayne 2000), i.e., it is formed by a root  $\sqrt{l}$ - followed by an agreement marker. Under this view, the restriction above can be reformulated as follows: bimorphemic clitics cannot occur in the left position of Type1 clusters (see also Cardinaletti 2010)

This generalization is supported by several Sardinian dialects, which exhibit this kind of phenomena only in clusters with the mirror order, i. e., in clusters in which the dative clitic occupies the ledtmost position. Consider, for instance, the following pattern from a number of Sardinian dialects (Manzini & Savoia 2005 vol. II:317.321). Crucially, the etymological form of the 3p dative clitic is *li* (24a), which occurs when it follows another clitic element as in (24b), while when it occupies the leftmost position of the cluster, in (24c), it must be replaced by the 'spurious' exponent *bi*.

- (24) a. **li dana kustu** (Ittiri SS, Padria SS, Luras OT,  
 to him/her gives this Siniscola, NU Galtellì NU, Bosa OR)  
 'He/she gives this to him/her'
- b. **bi/\*li lu dana**  
 to him/her it gives  
 'He/she gives it to him/her'
- c. **nde li/\*bi dana**  
 of.them to him/her gives  
 'He/she gives some of them to him/her'

In conclusion, all these context-determined phenomena seem to result from the same, general operation: the substitution of a bimorphemic clitic –  $\sqrt{l}$ +Agr 'to him/her' – with a monomorphemic one. Monomorphemic exponents (like 1/2, 3p reflexive clitics) are always free to combine with other clitic forms without giving rise to suppletive patterns even if they occupy the leftmost position of the cluster.

On the basis of this tentative generalization, we can improve Cardinaletti's analysis in proposing that the operation responsible for the mirror order of Type1 clusters is a process of *root incorporation*. In a nutshell, when Type1 clusters are built, only the root of the dative clitic incorporates and this gives rise to the above cases of suppletivism.

First of all, I will assume that bimorphemic clitics are formed by a root expressing Person features (say,  $\sqrt{\{P\}}$ ) followed by an agreement marker expressing Number and Gender:

- (25)  $[\text{D}^\circ \sqrt{\{P\}} [\text{Agr} \{G,N\}]]$

On the basis of these features, vocabulary items are inserted after syntactic operations have taken place (Halle & Marantz 1993):

- (26)  $[\text{D}^\circ \sqrt{\{P\}} [\text{Agr} \{G,N\}]]$   
 $\quad | \qquad \qquad |$   
 $\quad /l/ \qquad /i/ \qquad \rightarrow /li/ \text{ 'to him/her' (Sardinian)}$

When a bimorphemic clitic like *li* is clustered with an element referencing the higher internal argument, the root of the dative clitic undergoes incorporation. The stranded

agreement of the dative clitic normally remain unpronounced (but see below for some exceptions):



As a consequence of this process, the (sub-)constituent  $\sqrt{\{P\}}$  cannot trigger the insertion of the item *l-* as in this position it cannot combine with a proper Agr marker.

|      |                                  |  |
|------|----------------------------------|--|
| (28) | $[\sqrt{\{P\}} + D^\circ \dots]$ | $[_{D^\circ} t_{\sqrt{\{P\}}} [Agr \{G,N\}]$ |
|      | $ $<br>$*l$<br>to.him/her        | $ $<br>$lo$<br>it/him                        |

As the agreement material of the dative clitic is stranded in a discontinuous position, a monomorphemic element must fill the head hosting  $\sqrt{\{P\}}$ . 1/2 clitics cannot be inserted instead of *l-*, as they cannot match the  $\{P\}$  specification of the root. As a last resort, a dummy clitic – subject to cross-linguistic variation (see Pescarini 2010) – is inserted, as schematized below:

|      |                                  |  |
|------|----------------------------------|--|
| (29) | $[\sqrt{\{P\}} + D^\circ \dots]$ | $[_{D^\circ} t_{\sqrt{\{P\}}} [Agr \{G,N\}]$ |
|      | $ $<br>$bi$                      | $ $<br>$lu$                                  |
|      | $si$                             | $lu$   |
|      | $n$                              | $u$  |

Logudorese Sardinian  
Campidanese Sardinian  
Rocca Imperiale, etc.

The hypothesis above is supported by the phenomenon of *parasitic plural* (Halle & Harris 2005, Kayne 2010, Manzini & Savoia 2009), which is attested in languages<sup>5</sup> in which Number is expressed by the plural suffix *-s*. In such languages, 3p plural clitics exhibit a trimorphemic exponent, as schematised below:

|      |   |              |              |                        |
|------|---|--------------|--------------|------------------------|
| (30) | $[_{D^\circ} \sqrt{\{P\}} [Agr \{G\} [Agr \{N\}]$ |              |              |                        |
|      | $ $<br>$/l/$                                      | $ $<br>$/o/$ | $ $<br>$/s/$ | $= Sp. los 'them (m)'$ |

The same analysis holds for the 3p dative clitic *les/lis* 'to them'. Interestingly, when the plural dative occurs in true clusters (for instance, before the 3<sup>A</sup> clitic *lo* 'it/him'), it is replaced as usual by a dummy exponent (e.g. *bi*), but, crucially, its plural feature can be expressed by the morpheme *-s*, which in this case attaches to the right of the whole cluster as shown in (32). The resulting cluster does not mean 'them to him/her/them', but 'it to them':

|      |                   |                                     |
|------|-------------------|-------------------------------------|
| (31) | $nara=bi=lo-s$    | (Logudorese Sard., from Jones 1993) |
|      | tell=there=it-pl  |                                     |
|      | 'tell it to them' |                                     |

In the light of the above analysis, the position of the plural suffix *-s* can be accounted for in terms of stranding of the agreement features of the dative pronoun, whose root has incorporated into the accusative clitic *lo*:

<sup>5</sup> The phenomenon is mainly attested in South American and Sardinian varieties. Parasitic plural is pervasive in the Catalan dialect spoken in Barcelona (Bonet 1991), but traces of parasitic plural are to be found also in Old French (Giampaolo Salvi's p.c. reported in Benincà & Poletto 2005: fn. 14)

|      |  |  |
|------|--|--|
| (32) | $[\sqrt{\{P\}} + D^\circ \dots]$                 | $[_{D^\circ} t_{\sqrt{\{P\}}} [Agr \{G\}] [Agr \{N\}]$ |
|      | $\begin{array}{cc}   &   \\ bi & lo \end{array}$ | <br>-s   |

Jones 1993, focusing on Logudorese Sardinian, reports also cases of parasitic gender, i.e. cases in which the rightmost TV vowels expresses the gender of the dative clitic, rather than that of the accusative one:

- (33) nara=bi=l-a-s  
 tell=there=3p-f-pl  
 'tell it to them.f' (Logudorese Sard., from Jones 1993)

Under the hypothesis above, the analysis of (34) is as follows:

|      |   |  |
|------|---|--|
| (34) | $[\sqrt{\{P\}} + D^\circ \dots]$                | $[_{D^\circ} t_{\sqrt{\{P\}}} [Agr \{G\}] [Agr \{N\}]$ |
|      | $\begin{array}{cc}   &   \\ bi & l \end{array}$ | <br>-a-<br> <br>-s                                     |

## 5. Conclusions

In this contribution I presented a refined version of Cardinaletti's 2008 analysis of Italian clitic clusters. I agreed with Cardinaletti in claiming that morphological irregularities follow from a tight isomorphism between the syntactic structure and the morpho-phonologic realization of certain clusters. In particular, I supported her hypothesis that Italian exhibit a peculiar subclass of clitic combinations which are due to the incorporation of the dative clitic onto the accusative one (*à la* Kayne 1994).

However, I improved or departed from Cardinaletti's proposal with respect to the following points:

- i. I challenged the conclusion that Type2 clusters – those containing the locative *ci-* – are clusters *stricto sensu* on the basis of evidence from restructuring constructions. Crucially, Type2 combinations, unlike Type1, can split in restructuring contexts, at least in a substandard/oral register.
- ii. I rejected the idea that clusters are phonologic words as the observed lengthening of the vowel is compatible with the much more likely analysis that clusters are Feet (Peperkamp 1995, 1996, 1997).
- iii. I improved the analysis of the *-e/i-* alternation by suggesting that it is due to the blocking of a historical raising process.
- iv. I showed that the *-e-* we found in Type1 clusters and the *-e-* found in P+D sequences have a different nature.
- v. I argued that the process giving rise to the suppletivism of Type1 clusters is due to a process of root incorporation. This provides a straightforward account of the parasitic plural pattern.

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