CLITIC CLUSTERS AND MORPHOLOGICAL REPAIRS.
EVIDENCE FROM ITALIAN, SPANISH AND BARCELONÍ

DIEGO PESCARINI

0. Introduction

This article deals with synthetic clitic clusters in Italian, Spanish and Barceloní Catalan. Synthetic clusters (Bonet, 1991, 1995; Harris 1994, 1997) are sequences of clitics displaying a mismatch between their morphological form and their syntactic functions. For example, in Spanish a cluster formed by the dative clitic /le/ and the accusative /lo/ is not spelled out as /le lo/ but as /se lo/, as the reflexive clitic se replaces the dative le without a reflexive interpretation.

(1) \( le + lo = se lo \ (*le lo) \) (Spanish)

The aim of this paper is to account for these phenomena in the framework of Distributed Morphology (Halle & Marantz, 1993, 1994).

In section 1 I will suggest that synthetic clitic clusters are due to a constraint disallowing the same Vocabulary Item (namely, the same morpheme) to be inserted more than once in the same cluster. I will call it morphological-OCP (hereafter m-OCP) and suggest that its violations trigger post-syntactic operations (repairs) giving rise to the insertion of unexpected exponents, as in (1). Repairs are stipulated ex post to account for language-specific patterns: in sections 3-5 I will analyze the clitic clusters of Italian, Spanish and Barceloní Catalan and try to account for them through a limited and consistent set of repairs.
1. Vocabulary Insertion and m-OCP

Adjacent occurrences of the same morpheme are frequently avoided, as pointed out by Menn & MacWhinney (1984), Grimshaw (1997), Yip (1998), Ortmann & Popescu (2000), Ackema (2001), Neeleman & van de Koot (2004) among others. Even if this work will focus on the repairs, rather than on their trigger, three general remarks on the m-OCP are in order before addressing the data.

First, it is worth noting that this constraint targets Vocabulary Items (i.e. morphemes) and not homophonous exponents, as suggested by Wanner (1977) and Yip (1998). Sequences of homophonous morphs like the one in (2) are in fact allowed, while sequences of the same syncretic item – like the clitic si (see the analysis below) – are normally ruled out, cf. (3).

(2) se se lo mangia… (Italian)
   ‘if 3.refl 3.ogg eat…’

(3) *si si lava le mani
   ‘3.refl imp 3.wash the hands’

Second, the m-OCP is a violable markedness constraint. Sequences of identical clitics, which are allowed in several Romance varieties, must be therefore considered marked constructions that, in certain Romance varieties, cannot be repaired.

Finally I would claim that the m-OCP does not target clitic forms, but the Vocabulary Items forming clitics. Following Kayne (1991/2000) and Harris (1994) I will assume that clitics are decomposable and that their morphological structure is the one in (4), which sets the order of person, gender, number and case exponents. Such a template can be derived from a split DP architecture via head to head movement.

(4) person # gender # number # case

Since a single clitic corresponds to a structure like (4), clitic clusters can be represented as a sequence of two templates, as shown in (6).

(5) [Clitic1] + [Clitic2]
In accordance with Distributed Morphology (Halle & Marantz 1993), Vocabulary Items are inserted in (6) on the basis of their feature representations. Furthermore, the Morphological Component can modify the feature representation of a clitic before Vocabulary Items are inserted. For example, Spanish exhibits gender neutralization of the dative clitic le(s) (‘to him/her/(them)’), which can be captured by an *impoverishment* operation like (8), deleting gender features in the context of dative features. As a consequence of gender impoverishment, an epenthetic vowel /e/ is finally inserted.

(7)  
<table>
<thead>
<tr>
<th></th>
<th>Acc.</th>
<th>Dat.</th>
</tr>
</thead>
<tbody>
<tr>
<td>-f</td>
<td>lo(s)</td>
<td>le(s)</td>
</tr>
<tr>
<td>+f</td>
<td>la(s)</td>
<td></td>
</tr>
</tbody>
</table>

(8)  
[gender] → ø [dat]

According to Halle & Marantz 1993, 1994, the operations allowed within the Morphological Component are *fusion* (i.e. features of different nodes are grouped into a single one), *fission* (i.e. features of the same bundle are split into different morpho-syntactic positions), and *impoverishment* (i.e. feature deletion). Later on, I will take into consideration a further operation of *feature change*, in the spirit of Noyer 1998.

After post-syntactic operations, Vocabulary Items are inserted into (6) on the basis of the Subset principle.

(9)  
**Subset Principle (Halle & Marantz 1994)**

“In order for a Vocabulary Item to be inserted in a terminal node, the identifying features of the Vocabulary Item must be a subset of the features at the terminal node. Insertion may not take place if the Item has identifying features that do not appear at the node. The Item need not match every feature specified in the node;
rather Vocabulary Items are characteristically underspecified with respect to the features of the nodes into which they are inserted. It is therefore not uncommon for several Vocabulary Items to be available for insertion into a given terminal node. The most highly specified Vocabulary Items whose identifying features are a subset of the features of the terminal node win the competition and is inserted."

Vocabulary Insertion is supposed to be sensitive to locality conditions and take place root-outwards (Bobaljik 2000). In particular, as a tentative hypothesis, one can argue that clitic clusters are targeted by the m-OCP when clitics are in an adjunct-like configuration (à la Kayne 1991:19-21) and therefore form a single syntactic constituent.

2. Interlude: a Note on Case Features

The analyses below are based on the manipulation of inventories of morphological features, including those capturing notions like ‘accusative’, ‘dative’, ‘genitive’, ‘locative’ etc. The debate on case features is rather speculative, as the sole empirical evidence is the distribution of syncretic case markers across genealogically related and unrelated languages (Calabrese 1994, forthcoming; Halle & Vaux 1998).

Romance clitic systems share several patterns of syncretism: for instance, 3rd person reflexive, locative and partitive exponents have frequently replaced 3rd person dative and 1st person plural clitics. We might assume that these substitutions are due to the substitution of such regular items (i.e. 3rd person dative and 1st person plural clitics) with less specific clitics, in accordance with the subset principle in (9). In the remainder of this subsection I will therefore focus on such replacements by assuming, in the spirit of Bonet 1991, Harris 1994, that the retreat to such unmarked elements (which derive from Latin locative particles HIC, INCE and INDE) is mainly due to impoverishment operations, which target gender, number and case features in order to avoid m-OCP violations.
Let us start considering the contrast between the so-called locative clitic (It. *ci*, Barceloní *hi*) and the etymologically ablative (It. *ne*, Barceloní *en*). First, the relationship among locative cases is asymmetrical: a brief survey on a sample of forty languages (from Comrie 1987) shows that Essive and Allative cases are frequently syncretic, while Ablative case is usually expressed by a dedicated exponent (see also Luraghi (1991) on Indo-European languages). This leads to a tentative analysis in terms of locative features, like (10), in which Ablative differs from other locative cases in containing a further feature [+source], while ‘essive’ and ‘ablative’ meanings are normally expressed by the same default locative element:

(10) \[
\begin{align*}
\text{ESSIVE} & \quad + \text{locative} \\
\text{ALLATIVE} & \quad + \text{locative} \\
\text{ABLATIVE} & \quad + \text{locative, + source}
\end{align*}
\]

The frequent syncretism of the 3rd person dative clitic and the locative one – observed within many Romance clitic systems, see Calabrese 1994, Loporcaro 1995 – can be therefore captured by assuming that the feature matrix of the dative case includes a [+locative] feature and that syncretism results from the impoverishment of further case features.

(11) DATIVE \quad + \text{locative, etc.}

Mutatis mutandis, the syncretism between ablative and genitive/partitive clitics is due to the fact that the features [+locative, +source] are part of the feature representation of what we use to call ‘genitive/partitive’, see also Bonet (1991) and Penello (2004).

(12) GEN./PART. \quad + \text{locative, + source, ecc.}

In (13) I summarize the proposals on case decomposition and in (14) I provide an inventory of locative clitics. The match between (13) and (14) gives rise to the patterns of syncretism often displayed in Romance.

(13) ESSIVE \quad + \text{locative}
ALLATIVE + locative
ABLATIVE + locative, + source
DATIVE + locative, etc.
PARTITIVE + locative, + source, etc.

(14) \( ne \leftrightarrow + \text{locative, + source} \)
    \( ci \leftrightarrow + \text{locative} \)

The last remark has to do with the reflexive/impersonal syncretism (\(si/se\)), which, as previously mentioned, is frequently involved in syncretic patterns. In the next sections I will follow Reinhart & Reuland (1993) assuming \(si\) as a bare 3rd person clitic lacking further \(\phi\) specifications. This - in accordance with the Subset principle - explains why \(si\) is found as both a reflexive and an impersonal pronoun.

3. Italian

Table (16) reports a complete list of Italian clitics; phonologically conditioned allomorphs can be accounted for by the readjustment rule in (15), which applies only cluster-externally.

(15) /i/ \(\rightarrow\) /e/ /_/, n/
     [+high] \(\rightarrow\) [−high] /_/[+cons, +son]

(16) | 3 | 1 | 2 |
    | m | F |
    | Acc –pl | lo | la | mi | ti |
    | +pl | li | le | ci | vi |
    | Dat –pl | gli | le | | |
    | +pl | gli | gli | |
    | Ref/imp | si | | |

= acc
3rd person clitics show fused vocalic endings expressing both [gender] and [number]: m.sg -o, f.sg -a, m.pl -i, f.pl -e. Furthermore, besides the default 3rd person l-, Italian exhibits the exponent gli /hi/, which references 3rd person datives (it normally expresses the m.sg, but in uncontrolled speech it is allowed to reference f and pl indirect objects). The distribution of the dative item gli, which will play a central role in the analysis of clusters, can be captured by an operation of fusion like (17), which creates a single syntactic node in which the cumulative Vocabulary Item (18) is inserted.

(17) \[\text{[person][case]} \rightarrow \text{[person.case]}\]

(18) \[\lambda \rightarrow 3.\text{dative}\]

This solution, however, is theoretically problematic because it violates locality conditions, as [gender] and [number] nodes are between [person] and [case]. Gli must be therefore analysed as an allomorph of the 3rd person marker, whose distribution is constrained by the presence of a case feature ‘dat’\(^1\), cf. (19).

Finally, as already suggested in section 2, the distinction between l and s (3rd person non-reflexive vs reflexive) is supposed to be due to further \(\phi\) specifications, which are not allowed in the case of s-. The list of Italian Vocabulary Items for 3rd person clitics is therefore as follows.

(19) \[\lambda- \leftrightarrow 3 / \text{dative}, (-f, -pl)\]

\[ -o \leftrightarrow -f, -pl / \text{acc}\]

\[ -a \leftrightarrow +f, -pl / \text{acc}\]

\[ l- \leftrightarrow 3+\phi\]

\[ s- \leftrightarrow 3\]

\(^1\) Remember that ‘dative’ stands for a matrix of case features including [+locative], cf. section 2.
Italian shows several cases of synthetic clusters, which are mainly due to the m-OCP principle preventing the same Vocabulary Item from being inserted twice within the same cluster.

(20) a. *ne ne → ce ne
Dalla libreria, di libri ce ne (*ne ne) ho presi tre.
‘From the shelf, of books, ABL PART I have taken three.’

b. *ci ci → ci
A casa ci (*ci ci) portano loro.
‘To home LOC 1.PL.OGG bring they’

c. *si si → ci si
Ci si (*si si) lava le mani.
‘REFL IMP wash the hand.’

d. *le lo/a/e/i → glielo/a/e/i
A lei il libro glielo (*lelo) portiamo noi.
‘To her the book 3.DAT.F+3.ACC.M bring we.’

e. *le ne → glie ne
Di libri, a lei, glie ne (*lene) portiamo tre.
‘Of books, to her, 3.DAT.F+PART we bring three.’

In what follows, I will try to account for the patterns above in terms of repairs triggered by m-OCP violations, as suggested in section 1.

✓ Ablative + partitive (ne + ne = ce ne)
This cluster, which has been already addressed by Saccon (1988), is subject to sociolinguistic distribution, because, as far as I can see, the usage of ablative ne is rather rare in northern speakers.
The resulting cluster (ce ne instead of *ne ne) can be accounted for by an operation of impoverishment deleting the feature [+source]. Such
an operation causes the insertion of a bare locative instead of the ablative clitic.

(21) \ [+\text{locative}, +\text{source} \] \text{: } ne → ce

If the cluster is formed by clitics resuming left dislocated constituents, speakers prevent this configuration by omitting the ablative clitic, which in left dislocation constructions is not mandatory.

\checkmark \text{Locative} + 1^{st} \text{ person plural} (ci + ci = ci)

When a locative clitic ci violates the m-OCP, like in (20.b) = (22), it is deleted.

(22) \text{ ci} + ci \rightarrow ci

Following the analysis in (21), such a deletion can be captured by a rule like (23), which deletes the [+locative] feature.

(23) \ [+\text{locative} \] \text{: } ci \rightarrow \emptyset

However, such an operation of [+locative] impoverishment might be redundant. In fact, the null insertion in (22) can follow automatically from the absence of a less specific Vocabulary Item. In other words, ci can be considered a sort of default element, which, by definition, cannot be replaced according to the Subset Principle, and, in the end, can only be deleted (see Pescarini, to appear).

\checkmark \text{Reflexive} + \text{impersonal} (si + si = ci si)

In Italian, reflexive si precedes impersonal si, as shown by the descriptive template in (24). When *si si becomes ci si, we can therefore suppose that the replaced clitic is the reflexive one. Cinque (1988) and Bonet (1991), on the contrary, suggest that the si to ci substitution regards the impersonal clitic (which is [+pl] as it triggers plural agreement): in particular, Bonet argues for a feature change operation turning [3] into [1] in order to allow the insertion of the 1st person plural clitic ci.

(24) | Mi | Ti | Ci | Si (refl.) | Lo/La | Si (imp.) | Ne |
    | Gli/Le | Vi |   |      | Li/Le |        |   |
Alternatively, one can suggest – following the discussion above – that this synthetic cluster is a case of retreat to the default exponent, in which the default ci is inserted in order to repair a violation of the m-OCP.

✓ 3. dative feminine + 3. accusative (le + lo, a, e, i = glielo, a, e, i)

The fourth synthetic pattern in (20) – rewritten here as (25) – shows that the 3rd person f dative clitic le is always replaced by glie /hel/* before another clitic beginning with l-:

(25) \[
\text{le} + \text{lo, a, e, i } \rightarrow \text{glielo, a, e, i } /\text{hel}, \ldots /
\]

The features of the cluster (25) are represented in (26.a): it is worth noting that gender and number features have been already fused into the same node before vocabulary insertion. Then, vocabulary insertion takes place giving rise to an m-OCP violation, since the /l/ exponent is expected to be inserted twice.

(26)

```
template P G # K +
  a. features 3 +f, -pl  dat 3 -f, -pl acc
  b. insertion *l # dat o -
  c. repair 3 -f, -pl - e -
  d. insertion2 λ - -
```

The most economic repair is a feature change operation – represented in (26.c) – turning [+f] into [–f]. This repairs the m-OCP violation as it allows λ- to replace l-, as shown (26.d).

Feature change operations are usually criticized since they are supposed to be unpredictable. This is not true, however, within a binary system like the one adopted here, wherein feature change entails the substitution of a feature with its unmarked (viz, negative) value. According to Noyer 1998, such value change operations can result from “independently needed persistent redundancy rules <applying> after Impoverishments delete marked values” (Noyer 1998: 269-270).

As a matter of fact, in cases like (26) impoverishment (e.g. [+f] → 0)

---

2 glie results from the masculine person marker gli via the readjustment rule (15).
cannot account for the insertion of gli, as gli is specified as \([-f]\), cf. (19) and the preceding discussion. Gender deletion would in fact generate a \([3, +pl]\) configuration triggering the insertion of si (as I will argue in the following section, this is the repair shown in the same environment in Spanish).

\[3.\text{dative.feminine + partitive (le + ne = gliene)}\]

This pattern is problematic for an m-OCP based analysis, as the clitics involved are clearly different. Probably, such a case shows that the m-OCP constraint I have assumed so far needs further refinements, even if at present, on the basis of my data, I cannot advance any improved hypothesis. Nevertheless, given the aim of the article, it is worth noting that the resulting pattern – hence, the whole repair strategy – is consistent with the one analysed above: I will therefore assume that – modulo the trigger – the analysis of the cluster *le ne is the same given in (26).

4. Spanish

The clitic paradigm of Spanish is less complex than the Italian one since it lacks locative and partitive/ablative clitics and the morphological structure of 3rd person clitics (27) is rather transparent. Harris (1994) derives it from a template like (28) and the set of Vocabulary Items in (29).

<table>
<thead>
<tr>
<th>(27)</th>
<th>Dative</th>
<th>Accusative</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- f</td>
<td>+ f</td>
</tr>
<tr>
<td>- pl</td>
<td>le</td>
<td>lo</td>
</tr>
<tr>
<td>+ pl</td>
<td>les</td>
<td>los</td>
</tr>
</tbody>
</table>

(28)

\[
\begin{array}{c|c|c}
\text{Stem} & \text{CM} & \# \\
\hline
l & o & s \\
\end{array}
\]

(29) a. Stem: 1 ↔ acc, dat
b. C(lass) M(arker):  e ↔ III_
a ↔ II_
o ↔ default
c. Number:  s ↔ + pl

The template in (28) and the list of Vocabulary Items in (29) are similar to those I have suggested in (4) and (19) for Italian, while my analysis will depart from Harris’ one with respect to the following assumptions:

a. -o,-a,-e are class markers (Harris 1994: 329);

b. l- is a case marker (Harris 1994: 331).

The analysis of -o,-a,-e as class markers is consistent with the analysis of the Spanish nominal inflection (Harris 1991a and 1991b), according to which the relationship between thematic vowels and gender is stated as following:

(30) "item-specific lexical assignment is necessary for class III; unmarked items are assigned to classes I and II by redundancy rule: feminine gender assigns II and I is the default class." (Harris 1994: 328)

In my opinion, however, the extension of (30) to the pronominal declension is redundant since in Romance a class alternation on the same root usually expresses gender contrastiveness. For instance, if we observe Latin adjectives and pronouns we can note that they are inflected according to the first nominal class when they agree with feminine nouns, while they follow the second class with masculine and neuter nouns. Romance pronouns behave as Latin ones, therefore, in the case of Spanish clitics too, I suggest to consider -a and -o as gender exponents expressing the feature [+f] and [–f]. Following the framework adopted here, it follows that e has to be accounted for as an elsewhere exponent inserted in the gender slot when [gender] is neutralized.

(31)  e ↔ elsewhere

---

3 First class adjectives, like *bonus, -a, -um.*
This gender neutralization is due to an operation of impoverishment like (32), which is consistent with the original proto-Romance paradigm, in which dative determiners do not present any gender distinction.

\[(32) \ [±f] \rightarrow 0 / [\text{dative}]\]

According to this analysis, the list of Vocabulary Items is therefore as follows:

\[(33) \quad -o \leftrightarrow -f\]
\[-a \leftrightarrow +f\]
\[-e \leftrightarrow \text{elsewhere}\]

If, alternatively, \(e\) was considered a dative marker, as shown in (34), we would require a series of further assumption, which in my opinion lead to wrong predictions.

First, if \(e\) was a dative marker, a fusion operation like (35) would be supposed to take place in order to prevent wrong strings as lose or lase, in which gender and case features are expressed by distinct exponents (\(a/o\) and \(e\) respectively).

\[(34) \quad e \leftrightarrow \text{dat}\]
\[(35) \quad \text{[gender][case]} \rightarrow \text{[gender.case]}\]

This operation, however, is theoretically problematic because it violates locality conditions, due to the intervening Number node (it resembles the aforementioned case of It. gli, which cannot be accounted for by a \([\text{person}][\text{case}]\) fusion, see above).

Furthermore, if \(-e\) was a dative marker, \(-a\) and \(-o\) would be supposed to bear case specifications, otherwise the Subset Principle would predict the insertion of \(-a/o\) in the case of feminine/masculine datives. The resulting inventory would be therefore the following one:

\[(36) \quad o \leftrightarrow -f, \text{acc}\]
\[a \leftrightarrow +f, \text{acc}\]
\[e \leftrightarrow \text{dat}\]
In conclusion, the morphology of Spanish can be accounted for on the basis of two alternative hypotheses: i) $e$ is an elsewhere marker resulting from gender impoverishment; ii) $e$ is a gender/case marker, which follows from the rule (35) and entails the specifications in (36). Crucially, the former hypothesis, which is more consistent with the previous analysis of Italian, provides a better account of the dialectal variation of Spanish, in particular of two phenomena called leismo and laismo respectively. The former phenomenon (“leismo”) consists in the use of $le(s)$ to express [+animate] masculine objects (instead of $lo(s)$), while the former (“laismo”) consists in the use of $la(s)$ to express [+f] indirect objects (instead of $le(s)$).

The analysis of the leistic pattern brings evidence for the first hypothesis: if $e$ is an elsewhere item, such a pattern follows straightforwardly from the specialization of $-o$ as an inanimate exponent:

(37) $o \leftrightarrow \neg f, \neg \text{animate}$

On the other hand, if $e$ was a dative marker (second analysis), its specifications would be very complex, as the same exponent could reference either direct or indirect objects, cf. (38).

(38) $e \leftrightarrow \text{dat v acc, } \neg f, ++\text{animate}$

Also laismo brings evidence against the second hypothesis. According to the Subset principle $la$ can become a dative exponent because $-a$ lacks a case specification, like in (33). On the contrary, the extension of $-a$ to the dative clitic might result from the following rule of gender impoverishment, which targets only masculine datives:

(39) $[-f] \rightarrow 0 / \text{[dative]}$

In conclusion, it seems to me that the morphology of Spanish 3rd person clitics is consistent with the analysis of Italian, i.e. to the template (4), plus an operation of gender impoverishment like (32). The modifications in (37) and (39) account for leismo and laismo respectively.

The second remark on Harris 1994 regards the analysis of $l$ as a case
exponent. Rather, the comparison with other Romance varieties and
the analysis of the development of Romance determiners show that \( l \) is
a 3rd person marker derived from the Latin demonstrative ILLE\(^4\). The
Spanish inventory can be finally represented as in (40):

\[
\begin{align*}
\text{(40)} & \quad l^- & \leftrightarrow & 3 + \phi \\
& s^- & \leftrightarrow & 3 \\
& -o^- & \leftrightarrow & -f \\
& -a^- & \leftrightarrow & +f \\
& -s & \leftrightarrow & +\text{pl} \\
& -e^- & \leftrightarrow & \text{elsewhere}
\end{align*}
\]

(40) shows the same treatment of the reflexive clitic already adopted
for the analysis of Italian, i.e. the alternation \( l/s \) depends on the
presence of further \( \phi \) specifications. On the basis of this analysis, let
us analyze the sole synthetic cluster of Spanish.

✓ 3.dative + 3.accusative \((le(s) + \ lo(s)/la(s) = se \ lo(s)/la(s))\)

This phenomenon – usually called ‘spurious se’ construction – shows
the same pattern discussed for Italian (end of sect. 3), i.e. an
anomalous opacity targeting the 3\(^{rd}\) person dative clitic \( le(s) \) before 3\(^{rd}\)
person objects. Spanish, however, differs from Italian under two main
aspects, which are probably related:

- a. Spanish does not exhibit any 3\(^{rd}\) person allomorph, like It. \( l/h; \)

- b. Spanish replaces the dative clitic with a reflexive clitic.

The derivation of a spurious \( se \) is finally as follows:

\[
\begin{array}{|c|c|c|c|c|}
\hline
\text{Template} & \text{P} & \text{G} & \# & \text{k} +
\hline
\text{a. features} & 3 & +/–f & +\text{pl} & \text{dat} & 3 & –f & –\text{pl} & \text{acc}
\hline
\text{b. impov.} & 3 & \phi & +\text{pl} & \text{dat} & 3 & –f & –\text{pl} & \text{acc}
\hline
\text{c. insertion} & *l \text{ m-} \text{OCP}! & \phi & +\text{pl} & \text{dat} & l & o & - & -
\hline
\text{d. repair} & 3 & \phi & \phi & -
\hline
\text{e. insertion2} & S & e & - & -
\hline
\end{array}
\]

\(^4\) An anonymous reviewer notes that the \( l \) exponent expresses 3\(^{rd}\) person also in
many subject clitics of Northern Italian dialects.
In (41.a) all features corresponding to the cluster are represented according to the template in (4). In (41.b) the operation of gender impoverishment (32) targets the dative clitic, then m-OCP blocks the insertion of two \( l \) markers, as shown in (41.c). Spanish – unlike Italian – does not have any other 3\textsuperscript{rd} person allomorph, therefore it ends up impoverishing [number], as in (41.d). This allows the insertion of the reflexive exponent \textit{se}, which is a 3\textsuperscript{rd} person pronoun that does not require further \( \phi \) specifications (gender and number).

Some American dialects (Kany 1945) bring evidence in favour of this analysis, since they do not delete the plural feature, but they “move” it to the appropriate position of the accusative clitic. This phenomenon – called parasitic plural or floating plural – is described in (42).

\[
\begin{align*}
(42) \quad *\text{les \( l \)} & \rightarrow \text{se \( l \)} \\
\{3.\text{pl.dat}\}\{3.-f.-pl.acc\} & \{3.\text{dat}\}\{3.\text{acc.m.}\text{pl}\}
\end{align*}
\]

This pattern is consistent with the analysis above, even if it is problematic in terms of linearization. Indeed it violates the basic principles of locality since [number] ends up being expressed in a non-adjacent position. In the following section, we will observe that Barceloní Catalan seems to adopt a similar solution.

5. Barceloní

Since Bonet’s seminal dissertation (Bonet 1991) the clitic system of Barceloní has appeared as the most challenging system on which a theory on clitic clusters can be tested. Firstly I will try to decompose Barceloní 3\textsuperscript{rd} person clitics, in (43), following the same analysis of Italian and Spanish.

\[
\begin{array}{|c|c|c|}
\hline
& \text{Dative} & \text{Accusative} \\
\hline
\text{–pl} & \text{li} & \text{l} & \text{lo} \\
\text{+pl} & \text{li} & \text{lz} & \text{loz} \\
\hline
\end{array}
\]

As for Spanish, the analysis is quite straightforward since the order of the Vocabulary Items reflects perfectly the template in (4) – i.e.
person, gender, number, case – and an impoverishment operation causes gender neutralization of dative clitics. (44) is the resulting inventory.

\[(44) \quad l \leftrightarrow 3 \]
\[\circ \leftrightarrow f \]
\[z \leftrightarrow +pl \]
\[i \leftrightarrow +loc \]

The /i/ exponent is analyzed by Bonet as a syncretic item expressing both the locative clitic and, in combination with \(l\)-, the dative marker. The specification of the partitive/ablative clitic \(en\) is the same as in Italian (namely, [+locative, +source, etc.], therefore I will not repeat the analysis here. Furthermore, Barceloní exhibits a 3rd person neuter clitic \(/u/\) (orthography: \(ho\)), which references inanimate objects or is used as a prosentence.

\[(46) \quad Això, ho traüré de l’armari ara.\]
\[\text{That, it I will get out of the closet now}\]
\[\text{‘That, I will get it out of the closet now.’}\]

With respect to the clitic \(ho\), I will adopt the traditional [n]euter feature, keeping it unanalyzed.

\[(45) \quad u \leftrightarrow 3, n, –pl, acc \]
\[n \leftrightarrow +loc, +source \]

In conclusion, (47) reports the complete list of vocabulary items:

\[(47) \quad u \leftrightarrow 3, n, –pl, acc \]
\[i \leftrightarrow \text{dat, loc} \]
\[n \leftrightarrow \text{part, abl} \]
\[l \leftrightarrow 3 \]
\[\circ \leftrightarrow f \]
\[z \leftrightarrow +pl \]

All Barceloní clusters are summarized in table (48): each cell contains a combination of two clitics. Bonet (1991) noticed that the main
characteristic of the system in (48) is that clusters are spelled out as a single clitics, e.g. \( n + u = li \). In a single case - the dative + genitive cluster \(*{lzi+n}\) – the resulting form does not seem a single element, as the genitive clitic \((e)n\) is ‘infixed’ inside the dative clitic \( lzi \): \( lzni = \) ‘to-them of-it’.

\[(48)\]

<table>
<thead>
<tr>
<th>acc</th>
<th>Gen</th>
<th>Loc</th>
<th>Neu</th>
</tr>
</thead>
<tbody>
<tr>
<td>pl</td>
<td>/n/</td>
<td>/i/</td>
<td>/u/</td>
</tr>
</tbody>
</table>

b. Gen  /n/  Lzni  Lzi  Lzi

Dat +pl  lzi  lzi  lzi

Dat –pl  ni  li  li

Acc +pl  lzi  lzi  *

Acc –pl  li  li  *

Neu  li  li  *

Gen  ni  -  li

The apparently chaotic pattern in (48) can be captured through four main generalizations:

\[(49)\]

a. two person markers (e.g. \( l, /u/ \)) cannot be clustered;
b. \( [\text{plural}] \) always appears;
c. \( [\text{gender}] \) never appears;
d. \( n \) becomes \( i \) iff another \( i \) is not present.

In my opinion a-d can be derived from the same kinds of operations accounting for Italian and Spanish.

a. The first generalization derives directly from the m-OCP. Unlike Italian and Spanish, however, Barceloní does not exploit gender and number impoverishments, but avoids m-OCP violations by deleting person features.

b. The Barceloní treatment of \( [\text{+pl}] \) is similar to the South American Spanish pattern of parasitic plural: \(-s\) is always linearized in the rightmost position of the cluster.

c. Gender is never spelled out as gender impoverishment targets the whole cluster (while in Spanish and Italian morphological operations target single clitics).

d. The transformation of \( n \) into \( i \) can be accounted for by an operation of impoverishment deleting \([+\text{source}]\). As a consequence, the locative clitic \( i \) replaces the ablative/partitive,
like in the Italian cluster *ce ne* (instead *ne ne*, cf. p. 246). It is worth noting that this operation is blocked when another locative clitic *i* is already present. This constraint follows straightforwardly from the m-OCP, as it prevents *ii* clusters.

Let us now analyze the clusters in (48) on the basis of the suggestions above.

3.acc + 3 dat \( (l(z)i + lez = l(z)i; l(z)i + u = l(z)i) \)

I will account for the Neuter + 3.dat as a case of 3.acc + 3.dat since I have analyzed *u* as 3rd person, neuter, accusative. The derivations of the most problematic cases are illustrated in (51) and (53).

\[(50)\]

\[li + ləz = lzi\]

3.–pl.dat 3.+f.+pl.acc

\[(51)\]

<table>
<thead>
<tr>
<th>template</th>
<th>P</th>
<th>G</th>
<th>#</th>
<th>K</th>
<th>+</th>
<th>P</th>
<th>G</th>
<th>#</th>
<th>K</th>
</tr>
</thead>
<tbody>
<tr>
<td>features</td>
<td>3</td>
<td>+f</td>
<td>−pl</td>
<td>dat</td>
<td>3</td>
<td>+f</td>
<td>+pl</td>
<td>acc</td>
<td></td>
</tr>
<tr>
<td>Impover.</td>
<td>3</td>
<td>ø</td>
<td>−pl</td>
<td>dat</td>
<td>3</td>
<td>ø</td>
<td>+pl</td>
<td>acc</td>
<td></td>
</tr>
<tr>
<td>insertion</td>
<td><em>!m-OCP!</em></td>
<td>ø</td>
<td>−pl</td>
<td>dat</td>
<td>l</td>
<td>z</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>repair</td>
<td>ø</td>
<td>ø</td>
<td>−pl</td>
<td>dat</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>i</td>
<td></td>
</tr>
</tbody>
</table>

\[(52)\]

\[li + u = li\]

3.–pl.dat 3.+n.–pl.acc

\[(53)\]

<table>
<thead>
<tr>
<th>template</th>
<th>P</th>
<th>G</th>
<th>#</th>
<th>K</th>
<th>+</th>
<th>P</th>
<th>G</th>
<th>#</th>
<th>K</th>
</tr>
</thead>
<tbody>
<tr>
<td>features</td>
<td>3</td>
<td>+f</td>
<td>−pl</td>
<td>dat</td>
<td>3</td>
<td>+n</td>
<td>−pl</td>
<td>acc</td>
<td></td>
</tr>
<tr>
<td>impoverishment</td>
<td>3</td>
<td>ø</td>
<td>−pl</td>
<td>dat</td>
<td>3</td>
<td>ø</td>
<td>−pl</td>
<td>acc</td>
<td></td>
</tr>
<tr>
<td>insertion</td>
<td><em>!m-OCP!</em></td>
<td>ø</td>
<td>−pl</td>
<td>dat</td>
<td>l</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>repair</td>
<td>ø</td>
<td>ø</td>
<td>−pl</td>
<td>dat</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>i</td>
<td></td>
</tr>
</tbody>
</table>

257
Since $ii$ is ruled out by the m-OCP, one of the two $i$ exponents is not realized overtly, like in the Italian case *ci ci.

This complex structure is formed by the combination of single vocabulary items, which are put into a linear order by the template of Barceloní, stating that the partitive clitic precedes the locative one (vs the Italian order (24)). Remember that in this analysis – which follows Bonet’s one – $i$ is a free morpheme.

Lastly, the form $ni$ is due to a readjustment rule avoiding the /lzn/ phonologic cluster (Harris 1997).

In this case an operation of impoverishment takes place deleting the [+source] feature. Therefore the locative clitic is inserted instead of the ablative/partitive, as in the Italian cluster ce ne (from *ne ne). This case is problematic since it cannot be accounted for as a case of m-OCP violation (again, like the Italian cluster le ne, in the last part of section 3).

Gender impoverishment targets the whole cluster, which in fact behave like a dative clitic. Since I have suggested that [+loc] is part of the feature representation of [dative], I assume that [+loc] is the feature causing gender impoverishment. After gender impoverishment, the locative exponent is adjoined to the person clitic.

[+source] is impoverished as described above (point 54.c); then [+loc] triggers gender impoverishment, which causes the deletion of the neuter feature [n]. As a consequence, the neuter clitic is expressed by a default 3rd person accusative $l$, while the genitive element is spelled out by the locative $i$. 
In this paper I provided a consistent account of various phenomena displayed by some Romance varieties. The first part of the paper has dealt with some theoretical issues concerning the structure of clitics, the representation of Vocabulary Items and the process of Vocabulary insertion. In particular, I have assumed that the process of insertion is constrained by some principles, in particular a morphological OCP avoiding multiple insertions of the same Vocabulary Item within the same cluster. Synthetic clusters result from a set of repair operations, which modify syntactic features when Vocabulary insertion violates m-OCP.

Before addressing such repairs, I analysed the morphological structures of clitics in Italian, Spanish and Barceloní: for each language, clitics have been decomposed into minimal elements. Second, the cases of synthetic clusters have been analysed in accordance with the framework above. In the following table I summarize the operations I have argued for in the previous sections in order to account for the morphology of clitics and clitic clusters in the three Romance varieties under analysis.

<table>
<thead>
<tr>
<th>(55)</th>
<th>Operations</th>
<th>Repairs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spanish</td>
<td>[gender]→ Ø, [dative]</td>
<td>[number]→ Ø</td>
</tr>
<tr>
<td>Barceloní</td>
<td>[person]→ Ø, [source]→ Ø</td>
<td></td>
</tr>
</tbody>
</table>
Operations always targets all clitic elements, while repairs are triggered only by constraints on clitic clusters (m-OCP above all). A caveat has to be made about the operation of [source] deletion, which is included in (55) among the repairs. Actually, in the case of Barcelona this is misleading as such an operation targets every cluster (but those already containing an /i/ exponent) and does not require a trigger.

References


Calabrese, Andrea (2003). On Impoverishment and fission in the verbal morphology of the dialect of Livinallongo in Christina Tortora, The Syntax of Italian Dialects, Oxford University Press.


Olivier. Innsbrucker Beitraege zur Sprachwissenschaft, Innsbruck, 223-240.


its Relation to Phonology and Syntax. Stanford: CSLI, 216-246.