

CLITICS: COOCCURRENCE AND MUTUAL EXCLUSION PATTERNS

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Our starting point for the discussion will be a set of assumptions, motivated in section 1, which include the idea that clitics correspond to specialized categories, and are inserted directly into the positions where they surface. Such categories are ordered in a universal hierarchy. In sections 2-5, we shall show that within such a framework, it is possible to account for some basic facts about the clitic string without having recourse to anything but a minimalist syntactic component. In particular no use is made of a specialized morphological component nor of optimality-type comparisons between derivations/ representations. The main facts addressed include parametrization of the order of clitics (dative - accusative vs. accusative - dative), mutual exclusion of clitics (accusative and dative, object and subject) and the emergence of what are described in the literature as default clitics ('spurious' *se*) or as opaque forms.

1. Theoretical and empirical background

1.1 Previous theories

Broadly speaking, two approaches to cliticization, specifically in Romance languages, are present in the generative literature. The first approach holds that clitics are generated as (part of) full DP's in argumental position and moved to a position adjoined to V (Kayne 1975) or to a functional head of the sentence (Kayne 1989, 1991, 1994). However if clitics are generated under VP and adjoined, say, to I it is impossible or very hard to predict that they appear in a fixed number, in a fixed order, with fixed cooccurrence (or mutual exclusion) patterns which do not necessarily correspond to the number, order, cooccurrence (or mutual exclusion) patterns of corresponding arguments and adjuncts. To be more precise, the theory described can derive the relevant properties of clitics in conjunction with a

morphological component able to (re)order strings (Bonet 1995, Halle and Marantz 1993, 1994). Unfortunately, to the extent that the (re)ordering operations match those of the syntax (Merge and Move), the resulting system is highly redundant. Viceversa to the extent that the two sets of (re)ordering operations do not match, the resulting system is considerably more complex, than one accounting for clitics in purely syntactic terms.

A second line of analysis holds instead that clitics are base-generated as functional heads (Sportiche 1996). We follow this second approach insofar as we assume that clitics are merged directly in the position where they surface and project their own specialized functional categories. We furthermore assume that the order of functional categories so defined is universal, much as hypothesized by Cinque (1999) for his adverbial hierarchies. Within such a theory therefore positions can neither be reordered (*contra* Ouhalla 1991) nor packed and unpacked (*contra* Giorgi and Pianesi 1998). This set of assumptions provides particularly stringent constraints when it comes to accounting for variation internal to the clitic string.

Contrary to Sportiche's (1996) characterization of clitic categories in terms of Case (Accusative Voice, etc.), we take the view that Case is not a viable syntactic category. One very general reason for this is that the grammar should be restricted to interpretable features (Brody 1997); a non-interpretable feature like Case is unrestricted or a mere diacritic for movement. Even if non-interpretable features are admitted in the grammar, Case would be the only example of a feature that is always non-interpretable (Chomsky 1995), i.e. it does not have an interpretable counterpart. Therefore we tentatively conclude that clitic positions cannot be characterized in terms of Case.

An alternative set of categories for clitics is potentially provided by the positions independently postulated to host arguments in a VP-shell conception of the predicate. The latter in turn can reflect the idea that the VP-shell is articulated into primitive predicates such as CAUSE (Hale and Keyser 1993) or *v* (Chomsky 1995), or alternatively into aspectual categories such as Origin and Measure (Tenny 1994, Borer 1994). But primitive predicates cannot have a place outside the VP-shell, while aspectual categories can. The latter, and in particular the two categories Or for the Origin of the

event and Meas for the Measure of the event, as in (1), have been used to characterize the clitic shell by Manzini and Savoia (1998).

- (1) Or = Origin of the event
 Meas = Measure of the event

In the simplest case, i.e. that of a transitive verb, Meas can be associated with the internal argument of the verb, while Or can be associated with the external argument. If to the aspectual notions of Or(iginator) and Meas(ure) of the event we add a notion of Loc(ation), whose position in the clitic hierarchy intermediate between Or and Meas corresponds to that of Borer's (1994) Delimiter, we obtain the clitic string of Manzini and Savoia (1999) reproduced in (2):

- (2) [Or [Loc [Meas

While Or coincides with the initial point of the event and Measure with its extension up to the eventual final point, Loc, as opposed to Borer's (1994) Del, does not correspond to an aspectual property. The idea is rather that the Loc category should be understood as providing a syntactic representation for one of the fundamental coordinates of discourse, the spatial one. Indeed according to Enç (1987) the utterance time (*now*) is syntactically represented in a C-type position to which the temporal specifications of the event, represented in I, are anchored. Following Manzini and Savoia (2001b) furthermore the speaker (*I*) and hearer (*you*) are syntactically represented by the specialized P category within the clitic string. In this perspective, the presence of a Loc category, i.e. of a syntactic representation of the spatial location of the event, is a counterpart to the existence of a spatial coordinate (*here*) in the universe of discourse.

Beside the clitic positions in (2), clitic categories such as N, Q, D and P(erson) itself are independently motivated by Manzini and Savoia (2001b) for subject clitics. Following Manzini and

Savoia (2001b), subject clitic categories corresponding to the features in (3) are hierarchically ordered as in (4):

- (3) P = Person, lexicalized by 1/2p clitics
N = Noun, lexicalized by 3p (singular) clitics
Q = Quantifier, lexicalized by (3p) plural clitics
D = Definiteness lexicalized by uninflected clitics

- (4) [D [Q [N [P

Assuming that the inflectional/denotational categories of subject clitics are ordered above the aspectual ones, we obtain the fragment of functional hierarchy in (5), used by Manzini and Savoia (1999, 2001a), Fici, Manzini and Savoia (1999), Cocchi (2000).

- (5) [D [Q [N [P [Or [Loc [Meas

Since clitics are generated directly in the position where they surface, there are clitic positions at least between I and C. At the same time, empirical evidence relating in particular to the doubling of clitics on either side of the verb, strongly argues in favor of a conception in which the clitic string repeats itself identical in each of the three main verbal domains, i.e. not only in the temporal domain immediately above I as in (5), but also immediately above V, i.e. in the basic predicative domain, and immediately above C, i.e. in the modal domain (Manzini and Savoia 1999). This gives rise to the organization of the sentence in (6), where the dotted space is to be filled by the string in (5):

- (6) ... [C ... [I ... [V

Despite the several empirical and theoretical advances that can be argued to accrue to the conception of the clitic string just illustrated, it becomes evident at close inspection that the analysis relies on assumptions that are themselves suspicious. In introducing the clitic hierarchy in (5), we have been fully explicit on the fact that it embeds two quite different sets of projections, namely aspectual projections and inflectional projections. Such an internal asymmetry is not in itself problematic; what is rather more troubling is another asymmetry between the two sets of categories. Aspectual specifications cannot be part of the lexical entry of a given clitic form, since they express the relation of the clitic form to the predicate and are therefore associated with the clitic by the process of lexical insertion. This situation contrasts with that of inflectional categories, that are associated with clitic forms as their intrinsic lexical property. In essence inflectional categories correspond to a series of referentially relevant properties, in other words properties that are crucial in fixing the denotation of the pronominal clitic. On the contrary aspectual properties have no relevance for denotation but establish the relevant relations between the event denoted by the verb and whatever arguments are denoted by the clitics. This asymmetry entails a real conceptual problem. For on the one hand, the inflectional hierarchy of clitics seems to organize properties that intrinsically belong to lexical items (independently of whatever their interpretation may be). On the other hand the aspectual hierarchy seems to provide an organization for categories which do not represent intrinsic lexical properties, but rather properties of the interpretation of couples of lexical elements (verb and clitic). Thus, while the inflectional string can be created by simple Merge of lexical items and projection of their features, the aspectual string must have an existence independent from that of the lexical items inserted into it.

Now, given a strict model of minimalism (Chomsky 1995), we expect that the entire contribution to phrase structure made by two lexical items such as a(n inflected) verb and a clitic consists in the merger of those properties that are specified for them in the lexicon. If so, the merger of an N clitic with an inflected verb (conventionally an I category) produces exactly what the description says, an ordered set (N, I). Hence evidently, assuming minimalist Merge, the

interpretation of the N clitic as the Meas or Or argument of the verb must be precisely that – the result of the application of some interpretive principle. We conclude that interpretive categories such as Meas and Or are to be eliminated from the clitic string, in favor of the purely syntactic categories of inflection. This does not mean that Meas and Or are to be eliminated as interpretations available for the relevant syntactic structures at the LF interface; on the contrary, this is what we want Meas and Or to reduce to, i.e. interpretations.

1.2 Clitic categories and clitic hierarchies

As we just saw, Manzini and Savoia (1999, 2001a) attribute the rough division observed between subject and object clitics (the former systematically preceding the latter when they cooccur) to a distinction between an inflectional string for subject clitics and an aspectual string for object clitics. In a conception in which all categories in the clitic string are denotational in nature, it seems correct nevertheless to respect the basic demarcation found between object and subject clitics and to reserve the latter for the higher positions of the string. One natural option in this respect is to identify subject clitics with the D position of the string. As is well-known from the work of Benincà (1994), Poletto (2000) an inflected subject clitic can cooccur with an uninflected subject clitic (typically *a*) in Northern Italian dialects. This is compatible with the existence of a single D position for subject clitics, if we assume that the doubling just described calls into play two clitic strings, i.e. with reference to the schema in (6), the clitic string immediately superordinate to I for the differentiated clitic and the string immediately superordinate to C for the non differentiated one.

In (5) we have assumed that D is the highest position in the clitic hierarchy. In this connection, however, it is relevant to briefly consider the structure of DP's containing a partitive *di* 'of' like (7), which according to Cardinaletti and Starke (1999) is identified with the highest functional projection of the DP. Similarly, Manzini and Savoia (forthcoming) propose that there is a position in the DP above the D position hosting the Determiner, characterized in terms of

intensional Op properties, as D_{Op}; it is D_{Op} that hosts *di*.

- (7) tre dei miei fratelli
 three of my brothers

What is directly relevant here is that on this basis, we establish at least for the DP a hierarchy in which the D projection is subordinated to a higher D_{Op} projection as in (8). As we shall see also in section 1.3, there are reasons to extend the sub-hierarchy in (8) from the DP to the clitic string, and in general to take the internal organization of the clitic string to reflect that of the DP and viceversa. Therefore (8) also represents the highest segment of the clitic string itself.

- (8) [D_{Op} [D ...

If the D area of the string, enriched as indicated in (8), represents the canonical domain of subject clitics and prepositions/ complementizers, the remaining projections in the hierarchy can be reserved for object clitics. Note that the original hierarchy in (5) already contained two positions Q and N, which can host the 3rd person clitics of the object series. The relative order D ... Q ... N suggested by the scopal properties of D and Q, and also reflected by the internal structure of the DP, will remain unchanged with respect to (5). To these two positions we must add a Loc position, which we have already justified in section 1.1. If within the structure of the DP, Loc is identified with the position of demonstratives on the grounds of the locative properties of these elements, the Loc position turns out, like the demonstrative one, to be close to the N head, indeed closer to it than the D ... Q quantificational series (Bernstein 1997, Brugè 1996). We can further identify the P position, endowed with discourse reference properties similar to that of Loc, with a slot immediately above it; the P position will now be reserved for object P clitics. As one last refinement it will prove useful to distinguish between the Q position for indefinite quantification from a higher

R(eferential) position for specific elements. If so, the hierarchy takes the final shape in (9):

(9) [D_{Op} [D [R [Q [P [Loc [N

The set of object clitics which we shall consider in the empirical discussion in sections 2-5, includes in particular accusative and dative clitics; needless to say, given our earlier rejection of Case as an explanatory category in grammar, reference to Case categories such as accusative or dative is purely descriptive. If dative and accusative are characterized by the same inflectional (3rd person) features, the question arises how they can be told apart at all. We identify the accusative with the lowest N position of the string, which therefore turns out to be the position associated with the internal argument (Meas) interpretation. As for the dative, one of the aims of our discussion is precisely to arrive at a satisfactory characterization of it. We shall furthermore make reference to the *si* clitic, associated in Italian with reflexives, impersonals, and passives. The only relevant point is that we take its insertion position to be normally Q, in virtue of its denotational properties, which are essentially those of a free variable (Manzini 1986). As detailed by Manzini and Savoia (1999, 2001a) an analysis along these lines derives the different construals for *si*, as impersonal, passive, reflexive.

Though other clitics are only indirectly relevant for the discussion to follow, we briefly note that the characterization of Loc in terms of spatial reference must be conceived in wide enough terms to include a whole series of possible interpretations associated with the locative clitic. Thus in a language like Italian *ci* 'there' can have a strictly locative meaning, an instrumental one, a comitative one, etc. The purely locative interpretation itself can be seen to be internally articulated in several different meanings. Thus the locative can be associated with a stative interpretation or with a motion interpretation, under which the locative typically refers to the coordinates of the final point of the event. In general, as we have already seen, the Loc category does not correspond to a point on the aspectual contour of the event. Rather it must be understood in connection with other

elements whose denotation is fixed by the universe of discourse, namely the speaker ("I"), the hearer ("you") and the temporal coordinates of the discourse ("now").

As for the partitive, on the basis of the analysis of the phrasal partitive *di + D* in (7) as a D_{Op} constituent, we can assign the partitive clitic, *ne* in Italian, to the category D_{Op} . The property D_{Op} associated with *ne* is a denotational property, like *D* or *Loc*; in other words it characterizes the way in which *ne* refers. The crucial characteristics of *ne* in this respect is that *ne* does not refer to a participant in the event associated with the verb, nor does it directly characterize a spatial, temporal or other coordinate of this event. For instance in (10) *ne* does not belong to the aspectual structure of "saw" nor to the discourse specifications associated with it; on the contrary the denotational content of *ne* enables us to fix the reference of the internal argument, i.e. "three". In short, the partitive does not directly denote an argument in the event structure, but allows us to establish the denotation of one of such arguments.

- (10) *Ne ho visti tre*
 of-them I-have seen three

Arguably, this property of *ne* accounts in a natural way for other contexts in which *ne* occurs, and in particular those in which *ne* establishes reference to a spatial coordinate of the event ("from there").

1.3 The internal structure of clitics

As well as an analysis of the overall structure of the clitic string and of the categories it consists of, an account of cliticization in Romance dialects presupposes an analysis of the internal structure of clitics themselves. Previous approaches in the literature include both morphological and syntactic ones. Among the former, is James Harris's (1994) account of the internal make-up of Spanish

clitics, which recognizes for the 3rd person series a lexical basis *l-* as well nominal class morphemes such as *a* (traditionally the feminine) and a number suffix *-s*. A syntactic, rather than morphological, characterization of the internal structure of clitics is attempted in a few recent papers, including Kayne (2000) on 1st and 2nd person clitics as opposed to 3rd person ones, and Cardinaletti and Starke (1999) on clitics compared to pronouns. The general idea of Cardinaletti and Starke (1999) is that clitics have the internal structure of a DP, albeit an impoverished one with respect to lexical DP's or even full pronouns. In their terms the latter are associated with a full structure, equivalent to a sentential CP; on the other hand clitics are characterized by a deficient structure, reducing to the equivalent of a sentential IP projection. According to Kayne (2000) on the other hand 1st and 2nd person clitics and pronouns lack full DP structure, while the latter characterizes 3rd person clitics, as revealed by the presence of full agreement features.

The approach that we take to the internal structure of clitics retains the intuition, present already in the work of Abney (1987), Szabolcsi (1994), that the structure of the noun phrase is organized along similar lines as the structure of the sentence. Thus the lowest nominal position in the noun phrase, like the lowest verbal position in the sentence, is associated with predicative content. As in the case of the sentence, we assume the existence of at least one I position in the noun phrase, whose generically inflectional properties will be specified in the course of the discussion. Furthermore, as the highest verbal position in the sentence, i.e. the lowest C position in Rizzi's (1997) hierarchy, is associated with modal properties (hence effectively with quantificational properties over possible worlds), we take it that the highest nominal position in the noun phrase is again C, associated with operator properties. We thus obtain the basic noun phrase skeleton in (11) built in parallel with the sentential skeleton in (6):

(11) ... [C ... [I ... [N

In the present conception of the sentence the fundamental positions for the insertion of the verb, i.e.

V, I and C, each involve the projection of a clitic string, as schematized in (6) above. By analogy, we expect that each of the nominal positions individuated in the discussion that precedes, i.e. N, I, and Op, involves the insertion of its own clitic string. Thus as in (6), in (11) the dotted spaces are to be filled by the clitic string in (9).

As we have already noted in section 1.2, the clitic hierarchy in (9) includes many of the categories generally assumed for the internal structure of the DP. Indeed D corresponds to the category of (definite) determiners and Q to the category of (weak) quantifiers; the ordering D - Q in turn corresponds to the basic ordering of strong quantifiers (definites) over weak quantifiers (indefinites). Furthermore D_{Op} has been argued for as a position for the preposition *di* ('of'). As for Loc, this position can be identified with category of demonstratives, on the grounds not only of the general considerations of section 1.2, but more specifically of the fact that in Romance dialects they surface coupled with overtly locative pronouns (Bernstein 1997, Brugè 1996). This set of observations leads us to conclude that the determiners of the noun, including D's, Q's and demonstratives, do not require specialized projection, but are simply inserted in the D, Q and Loc positions independently provided by the clitic string.

Going back to the basic skeleton in (11), we take it that the normal position of the head Noun within the Noun Phrase corresponds to I, exactly as the normal position of the Verb within the sentential skeleton. The lower N position corresponds to the predicative content of the Noun, while we take it that the head Noun is overtly lexicalized in the higher C position in cases where its associated functional material is enclitic rather than proclitic, or the head Noun itself suffices to fix the reference independently of the presence of Determiners or Quantifiers. In the Romance dialects, this is the case in particular for kinship terms according to the discussion of Manzini and Savoia (forthcoming). The relatively high position of kinship Nouns in the DP with respect to that of other Nouns is already suggested by Longobardi (1994). If we assume, as it is reasonable to, that the lowest position in the Noun Phrase, N in (11), coincides with the lowest position in the nominal string in (9), then I and C in (11) are just labels for the N positions of the higher strings. In other words, the

dotted spaces in (11) enclose just the functional subsequence D_{Op} - D - R - Q - P - Loc of the string in (9) and the structure of the Noun Phrase therefore results from the stacking of several of the sequences in (9) one above the other.

We are now in a position to turn to the analysis of clitic forms. Interpretive considerations tend to exclude Cardinaletti and Starke's (1999) conclusion that clitics are impoverished with respect to full pronouns, since definiteness properties, which are normally associated with the highest layer in the structure of noun phrases, are clearly lexicalized by clitics as well as by pronouns. To begin with, we can translate the morphological analysis of Romance clitics proposed in works such as James Harris (1994) into the present syntactic model by identifying gender morphemes such as *o*, *a* which accompany the *I* lexical base in many dialects with the *I* projection of a noun phrase. In other words, gender is not a functional specification of the noun, but a nominal head itself. Indeed gender does not add any referential specification to the predicative content of a Noun. Rather, as Di Domenico (1998) points out, there is a deep affinity between gender in the Indo-European languages we are considering and nominal inflection classes in other language families.

As for plural morphemes, a natural analysis within our framework identifies them with the Q category. This analysis applies in particular to number morphemes added to the nominal class (gender) morphemes, as is the case for *-s* in Spanish, but also in Sardinian, Friulan, Romansch dialects, yielding structures of the type in (12), which account for the *-as*, *-ɸs* observed in the plural nominal inflections of typical Sardinian dialects. These proposals introduce an asymmetry between the conceptual status of traditional gender morphemes, which lexicalize the nominal category *I*, and that of number morphemes, which lexicalize the functional category *Q* in the clitic string.

(12) (Sardinia)

- a. [_I *ɸ*] [_Q *s*] [_N]]
- b. [_I *a*] [_Q *s*] [_N]]

In (12) we only notated head-labels in our labelled bracketing representations, since we are only concerned with the position of head material. Within a conventional phrase structure theory, the I, Q and N heads in (12) will nevertheless project their phrasal constituents, i.e. IP, QP and NP respectively. The same applies to our representations throughout.

Inflections of the type in (12) can be added to adjectival or nominal bases but what interests us directly here is that they can be added to the *l* morpheme of 3rd person clitics. Precisely the observation that inflectional series of the type in (12) have independent existence as nominal and adjectival agreement morphemes suggests that 3rd person clitics involve a nominal head *l* which embeds a nominal constituent headed by the vocalic inflection morpheme. As illustrated in (13), we may take that *l* lexicalizes the normal inflectional position, i.e. I, within the Noun Phrase.

(13) [_I *l* ... [_I *a* [N]]]

The internal structures of clitics are directly relevant to an important question concerning the hierarchy in (9). In rejecting in particular the morphological model of Halle and Marantz (1993), we have adopted the point of view of minimalist grammar of Chomsky (1995), where syntactic structures are directly projected by the insertion of lexical material. Thus there cannot be structures such as (9) produced by the syntactic component, to which lexical material is matched by lexical insertion. Rather, if hierarchies such (9) holds, it must be because of independent constraints which as suggested below in section 6. can ultimately be thought of in Full Interpretation terms. This puts a heavy constraint on our grammar, since we cannot simply insert a clitic in an already given position as a default lexicalization, not presenting any mismatch with the syntactic category. On the contrary, we must be able to show that in each case it is an internal category of the clitic that projects the relevant category of the sentential string. The discussion that follows will uphold this general conclusion; in many cases we shall be able to show that the category projected by the clitic

on the sentential tree corresponds exactly to the category of the internal head of the clitic itself. Thus in the case of a clitic series such as (13), it will typically project N on the sentential tree. For pure ease reading, exactly as we describe clitics in terms of accusative, dative, 1st and 2nd person i.e. of features that do not correspond to our actual categories, so we will speak of their insertion points. In all cases we will understand by insertion point of a clitic, the category that the clitic itself projects on the basis of its internal constituency.

2. Relative order of clitics

In order to show that the syntactic theory of clitics sketched above is empirically adequate we shall consider the three main types of evidence from Romance languages quoted by Bonet (1995) in favor of her morphological analysis. The first such type of evidence concerns the fact that ordering of clitics can vary from language to language, though the underlying order of full lexical arguments remains apparently unchanging. One well-known case concerns the ordering of 3rd dative and 3rd accusative forms in languages such as Italian, where the dative precedes the accusative, and in languages such as French, where the accusative precedes the dative.

2.1 Dative - Accusative

In several Italian dialects, as in standard Italian, the dative form precedes the accusative form; this pattern is normally found in dialects of the Marche-Abruzzi-Molise area, and emerges in the dialects of Lucania as well as in Tuscan dialects, including Vagli di Sopra in (14). The (a) example displays the isolation form of the dative, the (b) example the isolation forms of the accusative. Note that the *ɔ* morpheme that surfaces in the feminine plural *l'ɔ* is a phonological alternant of *e* surfacing for instance in sentence-final position as in the enclitic *cam ɔ-le* 'call them!'; this yields an accusative clitic series *l/la/ɔi/le*. The (c) example shows the combination of dative and accusative,

in this order; as shown in (d), other clitics, such as the P clitic, also precede the accusative, while the dative is also followed by other clitics, such as the partitive in (e). In general, the 3rd dative form precedes all other object clitics that it can cooccur with. Conversely the 3rd accusative clitic follows all clitics that it can cooccur with. To economize on glosses, we have given the basic meaning of *li* as 'to him'. This is to be read as a shorthand for 'to him / to her/ to them' here and throughout the article.

- a. i ①i ɤa kɤkwestɤ
he to.him gives this
- b. i l/la ①i/lɤ ɤveɤɤ
he him/her/them-m./them-f. sees
- c. i ①i l/la ①i/lɤ ɤɤa
he to.him it-m./it-f./them -m./them-f. gives
- d. i mɤ l/la ɤɤa
he to.me it-m./f. gives
- e. i ①i nɤ ɤa dɤdoi
he to.him of.them gives two

below in (16) for *Vagli* itself, in terms of classical phrase structure the insertion of a form such as **❶***i* or *la* etc. involves the Spec of Q or the Spec of N respectively. The insertion under Q or N in linear representations of the type in (15) can be read as shorthand for this more conventional representation. The same general principles apply throughout this article.

(15) *Vagli di Sopra*

D _{Op}	D	R	Q	P	Loc	N	I
	<i>i</i>		❶ <i>i</i>			<i>l/la/❶i/l</i> ⌘	❶ <i>a</i>

Given a lexical parametrization model of the minimalist type adopted here, configurations such as (15) cannot but depend on the lexical entries associated with the clitic formatives. To begin with, we take *l* forms to correspond to a noun phrase structure. Because a head Noun normally occupies the I position within the Noun Phrase, we take *l* to occupy the I position within its nominal constituent following the schema in (13a). As for the morphemes combining with *l*, *a* lexicalizes gender, i.e. nominal class, in the I position of a separate nominal constituent, deriving the singular feminine form *la* as in (16b). On the other hand the feminine plural *le* appears to combine *l* with an *e* formative associated with the N position of a separate nominal constituent, as shown in (16d). We justify this latter conclusion by observing that *e* is the nominal morphology that turns up on the participle in the absence of person, number and gender agreement with the object or subject; in the terms of Manzini and Savoia (forthcoming) this means that *e* corresponds to a pure N form. The structure in (16d) implies that in the feminine, plurality is not lexicalized through a Q morpheme, but rather through the switch from the nominal inflection class *a*, to what we take to be a pure N morphology, i.e. *e*. In the masculine plural, we can assume that **❶***i* consists of a *i* morpheme lexicalizing plurality in Q, while **❶** corresponds to the head of its own nominal constituent, as in (16c). As for *l* of the so-called masculine singular, it corresponds to uninflected *l*, as in (16a).

(16) *Vagli di Sopra*

- a. $[_I l \quad [N]]]$
- b. $[_I l \quad \dots \quad [_I a \quad [N]]]$
- c. $[_I \textbf{\textit{i}} \quad \dots \quad [_Q i \quad [I \quad [N]]]]$
- d. $[_I l \quad \dots \quad [I \quad [_N e]]]$

According to our description, the language of Vagli also has a dative clitic, ***i***, invariant for number and gender. In fact, it is evident that ***i*** is the very same form analyzed above in (16c). More generally, the study of Italian dialects conducted by Manzini and Savoia (in press) reveals that what descriptive grammars treat as specialized dative forms generally coincide with accusative forms, typically masculine plural ones. We shall see more evidence for this in what follows (cf. also Manzini and Savoia in press). In other words, Case distinctions, at least between accusative and dative, are in fact not registered by any specialized morphology in the pronominal system. This confirms our tentative conclusion that only inflectional features are relevant to the definition of such systems. The lexicon in (16) provides the basis for predicting structures of the type in (15). Indeed in virtue of its properties, which include in all cases one or more nominal bases in I or N, the whole series of clitics in (16) can be inserted in the N position of the string in (15), i.e. descriptively the accusative position. In virtue of its Q properties on the other hand the ***i*** clitic can equally insert in Q, i.e. descriptively the dative position. The insertion points of the Vagli clitics can therefore be summarized as in (16'); as before in conventional phrase structural terms N should be read as a shorthand for [Spec, N] and so on.

(16') *Vagli di Sopra*

- $l, la, le \rightarrow N$
- $\textbf{\textit{i}} \rightarrow N, Q$

The Q point of insertion of the ***ŋi*** clitic goes hand in hand with an interpretation of the Q property different from plurality, since as we have seen so-called dative ***ŋi*** is ambiguous with respect to number as well as gender. In this connection, we note that the syntactic Q category is compatible with plurality, but it does not imply it; thus we expect plurality to be a possible interpretation of Q, but not a necessary one. Next, we observe that in the case of an accusative ***ŋi***, the Q specification is part of its internal structure, but does not correspond to its position of insertion. Viceversa in the case of a dative ***ŋi***, Q represents both one of its internal specifications and its position of insertion in the clitic string. We propose that in the former case the internal Q specification of ***ŋi*** determines a plural reading. In the second case, however, the internal Q specification of ***ŋi*** is subsumed by the Q properties of the insertion position in the clitic string. Thus ***ŋi*** does not involve plurality, but only the interpretation that attaches to the Q position of the clitic string. As it turns out the plural reading and the distributive one are mutually exclusive in the sense that the distributor is not necessarily plural. We take this to be an effect of scope; in other words, either *i* has scope internal to the clitic, in which case its reading is plurality; or it takes scope in effect over the sentential string, in which case its reading is distributivity. One scope excludes the other.

It is worth stopping a moment to consider what this interpretation of the Q position of the sentential string may be, given that it cannot simply be reduced to plurality. The Q - N order seems to imply that Q hosts elements taking scope over N. It is independently known from the literature that scopal phenomena are sensitive to the relative structural embedding of arguments. Thus Reinhart (1983) reads the relative scope of quantifiers off c-command relations in surface structure. May (1985), while introducing the Quantifier Raising operation in abstract syntax, notices further surface effects such as the possibility for a wh-quantifier to commute in scope with a subject but not with an object.

One scope phenomenon that involves in a particularly obvious way datives and accusative is

that of distributivity; thus an appropriately quantified subject can distribute over an indefinite object and a dative over an accusative, while the reverse is not true. This in essence is also the conclusion of Beghelli (1997). Exceptions involve the presence on the distributor of an *each*, *every* quantifier, or the presuppositional reading of the distributor; in the first case no correspondence to surface argument hierarchies holds, in the second case at least the indirect - direct object hierarchy breaks down. In both cases Beghelli (1997) argues that dedicated quantificational positions are involved. Some relevant examples of the normal case are provided in (17)-(18) from standard Italian:

- (17) a. Loro hanno visto un uomo ciascuno
 They have seen a man each
- b. *Un uomo li ha visti ciascuno
 A man them has seen each
- (18) a. Assegnai loro un compito ciascuno
 I gave them an assignment each
- b. *Li assegnai a uno studente ciascuno
 Them I assigned to a student each

Putting together these observations with the hierarchy of argumental positions postulated in (9), it is natural to hypothesize that the accusative object does not have the properties of a distributor in that it corresponds to the purely nominal N category. Conversely the set of possible distributors corresponds to the set of arguments, ie. datives or subjects, which have independently been motivated to occupy a position with quantificational properties, be it Q or D. In general, we agree with Beghelli (1997), Beghelli and Stowell (1997) that quantificational properties are syntactically encoded; nor do they necessarily belong to the high C domain of the sentence, but can be found in the inflectional I domain. However in the present conception there aren't two distinct series of argumental and quantifier positions, but a single series, which is partially defined in

quantificational terms. Since the dative is associated with the Q position, we are led to conclude that the dative has quantificational properties, which can be construed as those of a distributor.

2.2 Accusative - Dative

In some languages, the 3rd dative form precedes the 3rd accusative form. This parametric possibility is illustrated by several dialects of Corsica and of Western Liguria, such as Olivetta S.Michele in (19) where 3rd accusative precedes all other clitics that it can cooccur with, in particular the P clitic, as in (d). In turn 3rd dative also precedes all other clitics that it can cooccur with for instance the partitive as in (e). Note that (a) illustrates as before the dative form in isolation, (c) the combination of accusative and dative, while (b) establishes that the accusative series is *u/a/ i/ e*:

(19) *Olivetta S.Michele* (Liguria)

- | | | | | |
|----|-------------------------|------------------------------|---------|------------|
| a. | el | i | ɣduna | aɣko |
| | he | to.him | gives | this |
| b. | u/ a/ i/ e | | ɣtami | |
| | him/her/them-m./them-f. | | I.call | |
| c. | el | u/ i/ a/e | i | ɣduna |
| | he | it-m./it-f./ them-m./them-f. | to.him | gives |
| d. | el | u/ a/ i/ e | mɔ | ɣduna |
| | he | it-m./it-f./ them-m./them-f. | to.me | gives |
| e | el | i | n | ɣduna ɣdyi |
| | he | to.him | of.them | gives two |

On the basis of the discussion concerning Vagli, datives are associated with a high position in the sentential nominal string, and specifically with the Q position. This conclusion is confirmed

by the empirical data of Olivetta, since as shown in (19e), the dative clitic precedes the partitive in N. If the dative is inserted under Q, the accusative, that precedes it, has at its disposal only the R position, where it can be preceded in turn by the subject clitic in D, as indicated in (20); as before, subject clitics are not our concern here:

(20) *Olivetta S.Michele*

D _{Op}	D	R	Q	P	Loc	N	I
	<i>el</i>	<i>u/a/i/e</i>	<i>i</i>				<i>duna</i>

Explaining the parametrization between Vagli in (14) and Olivetta in (19) requires the lexicon of Olivetta to be accounted for. The *i* form, subsuming in descriptive terms the accusative masculine plural and the dative has an internal structure comparable to that assigned to the **●i** clitic of Vagli in (16c); indeed we propose that *i* lexicalizes a Q position within its phrase, as in (21c). As for the other forms of the accusative paradigm, we can assign *u*, *a* and *e* to the I category, treating them as nominal class markers, as in (21a)-(21c). We note that the systematic lack of an *l* formative in the structures in (21), makes the clitics of Olivetta identical to the inflections observed on the nominal and adjectival system.

(21) *Olivetta S.Michele*

- a. [I *u* [N]]
- b. [I *a* [N]]
- c. [Q *i* [I [N]]
- d. [I *e* [N]]

What remains to be seen is how the lexicon in (21) relates to the structure in (20). To begin

with, the Q specification of the *i* clitic makes it compatible with insertion in Q. What is more, the internal structure of all of the elements in (21) is evidently compatible with insertion in R; indeed it is the general conclusion of Manzini and Savoia (in press) that R is a normal insertion position for all elements that are associated with specificity properties. Thus we obtain the basic observed order 3rd Acc-3rd Dat. In fact, nothing in the lexical entries in (21) prevents the 3rd person clitics from inserting in N; we must assume that the fact that they take a scope position such as R, rather than the N position associated with aspectual properties, is what the Olivetta child learns as a parameter of the language. Thus the insertion points for the dialect of Olivetta are as summarized in (21').

(21') *Olivetta S.Michele*

u, a, e	->	R
i	->	R, Q

Saying that in Vagli the accusative clitic appears in the N position associated with the internal argument interpretation, while in Olivetta it appears in the scopal position R for specific elements, is similar to saying that the wh-phrase appears in its thematic position in a language like Chinese, while it appears in scope position in a language like English. One may object that the position of the wh-phrase in English is the result of movement, not of merger. In fact, we take it that the idea that lexical material merges directly in the position where it surfaces holds not only for clitics but for all elements in grammar; one possible instantiation of this idea is the representational model of Brody (1995). More precisely, wh-phrases can be inserted in argumental position in English as well, in appropriate contexts. There is therefore a particularly close match between the properties of wh-phrases in a language like English and the properties described in section one for clitic *ci* of standard Italian which will either insert in Loc or in R according to the context. In general, we take it that the intrinsic denotational content of wh-phrases, as of clitics in the case at

hand, determines their compatibility with positions in the syntactic tree; their actual position will depend on other properties. These are identified by Chomsky (1995, 1998, 1999) with non-interpretable or EPP properties of the landing site; but these are only notationally lexical properties, whilst in fact they notate a syntactic parameter, which is fully comparable to the one given here for Vagli vs. Olivetta.

It is interesting to note that the same high position, R, that hosts the *u*, *a*, *e* clitics associated with the internal argument interpretation, can also host the *i* clitic, included the case when it is interpreted as a dative. This is shown by examples of the type in (22a), where the *i* clitic precedes the partitive *n* clitic and the impersonal *h* clitic (corresponding to Italian *si*). While the partitive can be associated with the N position, the impersonal is naturally associated with the Q position, in virtue of its generic quantificational interpretation. Therefore the *i* clitic will itself appear in a position higher than Q, i.e. R, as illustrated in (23a). The relevant contrast is with a dialect like Vagli, where the dative actually occurs after the impersonal; in this case, we must assume that the relative order of the two elements is the reverse, with **i** keeping the quantificational Q position and *si* being allowed in R, as in (23b).

(22) a. *Olivetta S. Michele*

i h n <di <katr

to.him one of.them says four

'One says a few things to him'

b. *Vagli di Sopra*

i si **i** <?a? i s<s?ldi

they one to.him give the coins

'One gives him money'

(23) a. *Olivetta S. Michele*

D_{Op} D R Q P Loc N I

	<i>i</i>	<i>h</i> <i>a</i>		<i>n</i>	<i>di</i>

b. *Vagli di Sopra*

D _{Op}	D	R	Q	P	Loc	N	I
	<i>i</i>	<i>si</i>	<i>i</i>				<i>a</i>

3. Mutual exclusion

Our general goal is to show that it is possible to maintain a purely syntactic theory of clitics based on a minimalist conceptions of both the computational component and of parameters. The next major phenomenon to be explained in this perspective is the mutual exclusion between clitics, which does not have a counterpart in the mutual exclusion between the corresponding full arguments. This phenomenon is also parametrized. Thus we have considered in section 2 two different types of languages in which clusters of dative and accusative are possible, in either order. In many Romance languages however (possibly the majority of them) such a combination is unknown. Dative and accusative do not combine, and in the simplest case only one of the two clitics is lexicalized. In fact, before discussing the mutual exclusion of accusative and dative we shall introduce and analyze a comparable case, involving Northern Italian dialects with subject clitics which do not allow for the combination of a 3rd person subject clitic with a 3rd person object clitic.

3.1 Object for subject

In the simplest case mutual exclusion between accusative and subject clitics leads to the lexicalization of only one of the two clitics, namely the accusative. Consider for instances the dialect of Tavullia (Marche). This is a subject clitic language, giving rise in the 3rd person to the *l/la/i/le* paradigm in (24a),

which coincides with that of 3rd person object clitics illustrated in (24b). Crucially, in the dialect of Tavullia the presence of a 3rd person object clitic excludes that of a 3rd person singular subject clitic, as in (25a); the presence of an additional P clitic does not interfere with this mutual exclusion, as in (25b). On the other hand the dialect allows for the combination of the 3rd person plural subject clitic *i* with the whole 3rd person series of object clitics, as in (24c); in this case the plural clitic takes on the denotation of both masculine and feminine. Note that there are several indications to the effect that the mutual exclusion between subject and object clitic in examples of the type in (25) is resolved in favor of the object. First of all, properties of the clitic such as masculine or feminine are interpreted as those of the object. Furthermore in an example such as (25b), the 3rd person clitic follows the P clitic, as predicted if it is inserted in N like object clitics, and not in D like subject clitics.

(24) *Tavullia* (Marche)

- a. ɛl/la/i/le te ʒcɛma
 he/she/they-m./they-f. you call(s)
- b. t ɛl/la/i/le ʒcɛ:m
 you him/her/them-m./them-f. call
- c. i l/la/i/le ʒcɛma
 they him/her/ them-m./them-f. call

- (25) a. ɛl/la/i/le ʒcɛma
 him/her/ them-m./them-f. calls
- b. m ɛl/la ʒda
 to.me it gives

Though we essentially elicit from our native speakers positive data, rather than grammaticality judgements, it may be useful to indicate that what we do not find are crucially sentences of the type in (26) as opposed to (25):

(26) *Tavullia*

a. * $\text{c}^{\text{h}}\text{la} \text{ } \text{c}^{\text{h}}\text{ma}$

he her calls

b. * $\text{c}^{\text{h}}\text{m la} \text{ } \text{c}^{\text{h}}\text{da}$

he to.me it gives

We can exclude that the impossibility of combining object and subject clitics depends on a prohibition against repeating the same clitic in the string. In the first place it is clear that sequences such as those in (26) do not involve identical forms. On the other hand, there are several dialects which contrary to those like Tavullia allow for the combination of two identical 3rd person clitics as object and subject respectively, as we already saw in section 2.1. Another example is provided the dialect of Andràz (Veneto) in (27) where the relevant combination is possible in all cases, including those where there is identity between object and subject also from a purely phonological point of view, such as the feminine singular in (27b).

(27) *Andràz* (Veneto)

a. el lo/la/ie/le 'veiga

he him/her/them-m./them-f. sees

b. la l/la/i/le 'veiga

she him/her/them-m./them-f. sees

Returning to Tavullia, the *l/la/i/le* clitics that we are concerned with are compatible both with insertion in the nominal N position of object clitics and with insertion in the D position of subject clitics. In the first case they are preceded by the P clitic in subject position as in (28a), while in the second case they are followed by the object P clitic as in (28b).

(28) *Tavullia*

a.	D _{Op}	D	R	Q	P	Loc	N	I	
		<i>t</i>					<i>l/la/i/le</i>	<i>c ma</i>	
b.	D _{Op}	D		R	Q	P	Loc	N	I
		<i>l/la/i/le</i>				<i>te</i>		<i>c ma</i>	

The fact to be explained about the dialect of Tavullia is that insertion of an *l/la/i/le* form in the N position of the clitic string blocks insertion of an *l* form in the D position, as in (29a), though the latter can host the *i* clitic as in (29b). From another perspective, we could equally say that insertion of an *l/la/i/le* clitic in N results in a form of partial pro-drop, given that 3rd person subject clitic forms are not lexicalized with the exception of the pure plural *i*.

(29) *Tavullia*

a.	D _{Op}	D	Q	P	Loc	N	I
						<i>l/la/i/le</i>	<i>c ma</i>
b.	D _{Op}	D	Q	P	Loc	N	I
		<i>i</i>				<i>l/la/i/le</i>	<i>c ma</i>

The lexical entries for 3rd person clitics provided so far for the dialects of Vagli and Olivetta treat the 3rd person clitics as noun phrases with an I head corresponding to an inflectional class (i.e. gender) morpheme in the Olivetta dialect, while in the Vagli dialect it corresponds to a definiteness specification *l*, which can in turn embed a nominal class morpheme. We propose that in the Tavullia

dialect, the *l* clitics have the same type of structure, as indicated in (30). The *i* clitic has the familiar structure in (30c), which makes it coincide with a pure lexicalization of Q.

(30) *Tavullia*

- a. $[_I \text{ } \text{ } l \text{ } [_N \text{ }]]$
- b. $[_I l \text{ } \dots [_I a \text{ } [_N \text{ }]]]]$
- c. $[_Q i \text{ } [_I \text{ } [_N \text{ }]]]]$
- d. $[_I l \text{ } \dots [_I e \text{ } [_N \text{ }]]]]$

We suggested above that the object for subject phenomenon reduces to the fact that insertion of one of the clitic forms in (30) in the N position of the string causes the Tavullia dialect to display a partial pro-drop phenomenon. In terms of the present analysis non-null subject languages, as is Tavullia in the ordinary case, require the lexicalization of the Definiteness properties associated with the D position of the clitic string, through the insertion a subject pronoun. Evidently in the cases under review, inserting one of the clitics in (30a), (30b), (30d) which by hypothesis is made up of a morpheme *l* intrinsically associated with Definite reference and a nominal class morpheme, satisfies the requirement that Definiteness properties be lexicalized, no matter whether the clitic is inserted in D itself or in N. If it is inserted in D it is interpreted as the subject of the verb, with whose inflection it agrees. Alternatively, however, the *l* clitic can be inserted in N, where its interpretation is that of the internal argument of the verb; the referential properties of the subject will be recovered in this case through the verb inflection. In either case we assume that in a dialect like Tavullia the insertion of an *l* element results in the lexicalization of Definiteness for the whole string. Therefore inserting one of the *l* forms in N excludes lexicalization of an *l* form in D. Generalizing this model we can assume that *l* lexicalizes all properties it is associated with for the whole string; in particular then the insertion of an *l* clitic prevents the re-lexicalization in the string of the nominal properties associated with the *l* morpheme, interpretively connected in our model to

3rd person reference.

The discussion that precedes does not yet take into account the peculiarity of *i* in the Tavullia dialect, namely that insertion of *i* in D is compatible with the presence in the N position of clitics belonging to the series in (30). We note that while the other clitics in (30) coincide with the combination of the two nominal bases represented by *l* and the vocalic nominal class, the *i* clitic in (30c) consists entirely of a functional specification, i.e. Q. The insertion of one of the forms in (30) in the N position of the string, while lexicalizing the Definiteness property, does not interfere with the lexicalization of purely functional properties such as Q; we can take it that the insertion of the Q form *i* in D is a consequence of this. In the same way, we can account for the fact that the clitics of the series in (30) can combine with clitics of the P series, as illustrated in (28). What P clitics have in common with the Q clitic is that they consist entirely of a functional specification. Because of this, P clitics, like *i*, do not interfere with the lexicalization of the Definiteness properties by one of the clitics in (30).

On the other hand, the discussion that precedes seems to predict that the insertion of the *i* clitic in N should also be compatible with the insertion of the whole series in (30) in the D position. In other words, we could expect that the Tavullia dialect, admitting of (24c), admits of (31) as well, which is instead ungrammatical.

(31) *Tavullia*

*la i ʒcɐma

she them calls

Given the quantificational (plural) properties shared by subject and object instances of *i*, there are no reasons to believe that different lexical entries are involved in (24a) and (31). Therefore it must be the point of insertion of the clitic, that determines its different behavior. We may begin by considering what makes a Q clitic, like *i* in the Tavullia dialect, suitable for insertion in N.

Remember that in the case in which an *l* clitic inserts in N or a Q clitic inserts in Q, there is a straightforward match between the internal head of the clitic and the position in the clitic string. Furthermore we have assumed that all clitics are compatible with certain positions, like D or R. Nevertheless neither of these two general rules for insertion works for the case of lexicalization of N by *i*. We suggest that the insertion of *i* in N is possible only to the extent that *i* is interpreted as a Q specification of N itself; in other words, the insertion of *i* in N yields the equivalent of a clitic form including an N head together with the quantificational (plural) specification. We suggest that due to the general nature of nominal heads in the Tavullia dialects, the insertion of *i* in N works like that of any other clitic in the series in (30), lexicalizing the Definiteness properties of the whole string, with the consequences already noted for the lexicalization of the D position.

As noted in the presentation of the data, the *i* that appears in subject position when one of the clitics in (30) is inserted in N has a plural reference independent of nominal class (i.e. gender in traditional terms). As an object, and as a subject in contexts where N is not lexicalized by one of the clitics in (30), the *i* clitic has plural reference restricted however to a particular nominal class (the so-called masculine). When it is inserted in N position, as in (24b) we have just theorized that *i* is interpreted a Q specification of N itself. We can assume that its taking on properties of nominal class are connected to its syntactic N property; the plural properties depend of course on its intrinsic Q properties. When *i* is inserted in subject position, and the N properties of the string are independently lexicalized, the *i* clitic takes on the value of a pure plural. Finally, when *i* is inserted in subject position and N is not independently lexicalized, as in (24a), again it takes on nominal class (masculine) interpretation. This suggests that in effect, in the Tavullia system, the lexicalization of plurality must in all cases be connected to a nominal property; in the contexts under consideration the latter surfaces precisely as a nominal class (i.e. masculine) property of *i* itself.

It is interesting to note that a dialect like Tavullia patterns with those of Vagli and Olivetta considered above, in that the so-called 3rd person dative coincides with the (masculine) plural, i.e.

with *i* in the case of Tavullia. We should naturally like to extend to dative *i* the analysis in (30c), which associates the *i* morpheme with the Q functional specification within the clitic structure. If so, we predict that the dative clitic will be able to insert in Q, as in the Olivetta dialect, or in R as in the Vagli one. The evidence in (32a) suggests that this second possibility is the correct one, given that *i* precedes the *si*-type clitic ④, which is itself inserted in Q. If we assume that *i* in R has the same properties as *i* inserted in D, we predict that it will combine with the accusative clitic series in (30), including *i* itself, and precede it, as is indeed the case in (32b).

(32) *Tavullia*

- a. *i* ④ *da* *un 'libre*
 to.him one gives a book
- b. *i* ɸl/la ɹda
 to.him it-m./it-f. he.gives

On this basis we can complete the picture of the insertion points for the clitics in (30) as indicated in (30'):

(30') *Tavullia*

- ɸl, la, le → D, N
- i* → D, R, N

In (32b), the presence of a clitic of the accusative series in N is sufficient to exclude the lexicalization of a subject clitic in D, while in the impersonal (32a) the problem does not arise. However, the exclusion of the subject clitic is determined also by the simple presence of the dative, as illustrated in (33).

(33) *Tavullia*

i da ʔkwe④t
 to.him he.gives this

The basis for this behavior is to be sought precisely in the characterization of the dative as a distributor over the N argument. Thus it can combine with a lexicalization of N by a clitic of the accusative series, as in (32b), in which case the accusative clitic can be assumed to exclude the subject clitic. Alternatively, it can combine with a lexical object (or an incorporated one for unergatives) as in (33); but its nature as a distributor implies in any event the lexicalization of N properties. Therefore even the dative in isolation effectively amounts to a lexicalization of the combination of quantificational properties with N properties. This excludes lexicalization of the subject, on the usual grounds that in a dialect like Tavullia nominal definiteness is lexicalized only once in the clitic string.

Support for this analysis come from the comparison of the data in (24a)-(24b) and (25b) with (34) below. As already indicated, (24a)-(24b) show that a subject clitic of the P series can combine with an object clitic of the series in (30) and viceversa. As we expect, furthermore, the presence of an object clitic of the series in (30) prevents the lexicalization of the subject clitic in (25b) in the presence of a P clitic functioning as a dative. But as shown in (34), the subject clitic is also optionally excluded also in cases where only the P clitic is lexicalized in the string, provided the latter functions as a distributor. We interpret this evidence along the same lines as (33); the optionality of the subject can be taken to be a result of the fact that only optionally is the P clitic computed as a distributor.

(34) *Tavullia*

(ʔl/la)me da 'kwe④t
 he/she to.me gives this

Going back to the general solution that we have proposed to the mutual exclusion of subject and object clitic in the dialects of the type of Tavullia, we note that it has several interesting properties differentiating it from other approaches to mutual exclusion phenomena found in the literature. In particular our analysis does not depend either on the identity of the clitics that are in complementary distribution nor on the competition for a single position. Indeed it is obvious not only that different clitics can be in complementary distribution as in (26) but also that different positions are available to the clitics in complementary distribution. Thus Tavullia has an N position to the right of P clitics for objects as in (28a) and a separate subject D position to the left of P clitics, as in (28b). What is more, the complementary distribution is not constrained by adjacency as can be seen by the contrast between (25b) and (26b). All of these properties of the mutual exclusion phenomenon strongly point to the irrelevance of morphophonological considerations and to the purely (morpho)syntactic nature of the phenomenon itself.

In this perspective we may consider what exactly is the parameter between Tavullia-like dialects and dialects like Andràz, i.e. the information that the child learning the language must deduce from the data. We take it that in the case of Andràz in (27) the Definiteness properties lexicalized by the nominal head *l* cannot be computed separately from the nominal class properties which they subcategorize, and they have to be lexicalized as many times in the string as there are interpreted arguments. On the other hand, in a dialect like Tavullia, it appears that the Definiteness properties lexicalized by *l* can in fact be computed separately from the nominal class inflections they embed, and they can go to satisfy the Definiteness properties of the entire string. This produces the object for subject effect we are aiming to explain. Indeed the insertion of an *l* clitic in object position, lexicalizes the Definiteness properties of the string, while at the same time the referential properties of the subject are recoverable from the D position corresponding to the verbal inflection.

The most natural way to construe these different properties of *l* in the Tavullia and Andràz dialects is in terms of scope. In other words, *l* in a dialect like Andràz takes scope uniquely over its

own constituent, while the scope of *l* in a dialect like Tavullia extends to the D position of the sentential string, even when the clitic is inserted lower. These different scopal properties are in turn not specifically introduced here in order to account for mutual exclusion. Rather they represent an independently needed property of grammars; they furthermore have already been invoked in order to account for clitics in connection with the fact that an *i* element (of Vagli, Olivetta, Tavullia) can be interpreted both as taking scope within its own nominal N head, in which case it is a plural, or as taking scope over the whole string, in which case its interpretation is that of a distributor (dative). As it happens, in the dialects considered so far, the scopal properties of the distributor are overt, in the sense that they correspond to insertion in Q; however Manzini and Savoia (in press) equally review cases where this reading corresponds to insertion of the relevant clitic in N. For an example of a specialized dative in N within this article we refer to the Làconi case, in section 5.

3.2. Accusative for dative

With this much background let's now return to the mutual exclusion of 3rd person accusative and dative clitics. In the simplest case only one of two clitics survives. We begin by considering the case of mutual exclusion, with survival of the accusative only. This situation is found in a number of dialects of Apulia, Lucania and Calabria including *Iacurso* illustrated in (35). As before, (a) illustrates the dative in isolation, (b) the accusative in isolation, and (c) the survival of the sole accusative in dative-accusative contexts. In this dialect, the accusative clitic generally follows the clitics it combines with, as in (d); the dative on the contrary precedes the clitics it cooccurs with, such as the partitive *nda* and the *si*-clitic in (e). The clitic repertory of a dialect like *Iacurso* includes three different forms for the accusative clitic, two for the singular (masculine and feminine) and one for the plural; the dative in isolation coincides with the descriptive accusative plural.

(35) *Iacurso* (Calabria)

- a. li 'ɸuna 'kistu
 him gives this
- b. lu/ la / li ɸviju
 him/her/them I.see
- c. lu/ la/ li 'ɸu☺☺u
 him/her/them I.give
- d. ti lu/ la/ li 'ɸu☺☺u
 to.you him/her/them I. give
- e. li si nda 'parra 'sɸmp^h
 to.him one of.it talks always

The distribution of the accusative in a dialect like Iacurso follows usual lines, in that the accusative is preceded by all other clitics; (36a) illustrates the simple case in which the accusative follows the P clitic. On the other hand the dative precedes both the partitive and the *si*-type clitic, leading us to conclude that it is inserted in R, as in (36b), where the *si*-clitic appears in Q and the partitive in N. Hence the mutual exclusion between two *l* clitics, one functioning as dative and one as the accusative, cannot simply be explained by the competition for the same position.

(36) *Iacurso*

- | | | | | | | | | |
|----|-----------------|---|---|-----------|---|-----|-------------------|-------|
| a. | D _{Op} | D | R | Q | P | Loc | N | I |
| | | | | | | | | |
| | | | | <i>ti</i> | | | <i>lu/ la/ li</i> | ɸu☺☺u |
-
- | | | | | | | | | |
|----|-----------------|---|-----------|-----------|---|-----|------------|--------------|
| b. | D _{Op} | D | R | Q | P | Loc | N | I |
| | | | | | | | | |
| | | | <i>li</i> | <i>si</i> | | | <i>nda</i> | <i>parra</i> |

Following the analyses proposed above, we treat *l* as a nominal I head. The morpheme *a*, descriptively associated to feminine gender, is the lexicalization of a nominal class property I, as in (37b). As for the *u* morpheme descriptively associated with the masculine, remember that Manzini and Savoia (2001b) theorize that what is normally described as the non agreeing form of the verb is in fact a form agreeing with the subject with respect to the N feature. Now, in the Iacurso dialect the past participle ending in the N agreement (or descriptively non-agreement) contexts is *u*; this favors a treatment of *u* as pure N, of the type in (37a). Naturally the *i* morpheme showing up in the plural and in the dative is in present terms a Q element, as in (37c). The nominal properties of all these clitics make them compatible with insertion in N; the *li* clitic can furthermore be inserted in R, presumably in virtue of its quantificational properties, as in (37').

(37) *Iacurso*

- a. [_I *l* ... [I [_N *u*]]]
- b. [_I *l* ... [_I *a* [N]]]
- c. [_I *l* ... [_Q *i* [I [N]]]]

(37') *Iacurso*

- lu, la → N
- li → R, N

In order to account for the mutual exclusion of accusative and dative in the Iacurso dialect, we take up again the line of explanation introduced for Tavullia above. Specifically we propose that when one of the forms in (37) is inserted in the N position of the clitic string, the properties associated with its *l* head are lexicalized for the string as a whole, preventing insertion of another *l* form. In particular, *l* is a nominal head establishing what is traditionally conceived of as the 3rd person reference. We can assume that insertion of an *l* form in the N position of the string

lexicalizes this nominal property for the whole string, making it redundant and hence impossible to insert another *l* form, for instance as the dative in R. The presence of an *l* form in N may therefore be interpreted as a straightforward lexicalization of the internal argument as in (35b); or it may interpretively imply reference to another 3rd person argument, such as the distributor in (35c).

Viceversa the insertion of the *li* distributor in R is possible only if the N position is not independently lexicalized by an *l* clitic. Nevertheless lexicalization of the dative, while excluding that of the accusative, is not able to subsume it; thus the dative only surfaces in the presence of a lexical object (or an incorporated one in the case of unergatives). This asymmetry can be connected to the fact that lexicalization of the internal argument requires that of a nominal class property, such as *u*, *a* in (37a)-(37b), or *i* itself interpreted as a plural specification of the *l* base. The dative alone does not suffice to lexicalize dative-accusative contexts, in that it does not lexicalize a nominal class property. The scopal properties of dative on the contrary can be subsumed by the accusative, provided the *l* specification of the latter is interpreted with the relevant distributor scope.

Analogously, in the case of the Tavullia dialect we have seen that insertion of a subject clitic of the *l* series excludes that of an object clitic, but does not subsume it; thus subject clitics only show up in intransitive contexts or with transitive verbs in the absence of an accusative clitic. Again the analysis proposed in section 3.1 predicts that this is so, in that the scopal properties that we have imputed to *l* are sufficient to lexicalize the D properties of the string, even if belonging to a clitic inserted in the N position. On the contrary, insertion of an *l* clitic in the D position cannot lexicalize the nominal class properties necessary to establish reference to the internal argument. We shall further strengthen the empirical basis for connecting the internal argument to nominal class in section 4.

The preceding discussion is based on the idea that the two constituents of which an *l* clitic typically consists, i.e. *l* itself and the vocalic head corresponding to nominal class, may in fact behave to a large extent independently of one another. If so, we may expect to find mutual exclusion phenomena that instead of involving the whole clitic, only involve the *l* subconstituent.

This case is indeed found, for instance in a dialects such as Gavoi in (38). (38a) illustrates the dative in isolation, (38b) the accusative in combination with a P clitic, and (38c) the combination of accusative and dative. While the clitics in (38a)-(38b) include an *l* morpheme, the cluster in (38c) has an *l* dative followed by an accusative including simply nominal class and eventually plural morphology.

(38) *Gavoi*

- a. li 'daʎa 'ɛustu
 to.him he.gives this
- b. mi lu/lɔr 'daʎa
 to.me it/them he.gives
- c. li u/a/ɔr/ar 'daʎa
 to.him it-m./it-f./them-m./them-f. he.gives

The accusative paradigm of a dialect such as Gavoi can be analyzed along the same lines indicated in (12) for Sardinian dialects in general. The *l* morpheme corresponds as before to the I head of a nominal constituent, embedding a separate nominal constituent headed by a vocalic morpheme *u*, *a*, *ɔ*. We treat *a* and *ɔ* as an I, i.e. a nominal class (gender) morpheme, as in (39b)-(39d), while considerations pertaining in particular to past participle agreement lead us to analyze *u*, as an N element in (39a). As suggested in (12) above, the plural morpheme *s* is a lexicalization of Q, as in (39c)-(39d); the *r* ending surfacing in the examples in (38) is simply a phonological alternant of *s*. Contrary to the other cases considered so far, the dative form does not coincide exactly with any of the accusative ones. We of course analyze the *l* morpheme again as for the accusative series. Furthermore we associate *i* with Q, as in (39e); this amounts to proposing that the Gavoi dialect, contrary to those considered so far, has a specialized lexicalization for distributivity, i.e. *i*, distinct from the lexicalization of plurality, i.e. *s*. Another example of this is provided by the dialect of

Làconi in section 5.

(39) *Gavoi*

- a. [I (*l*) ... [I [N *u*]]]
- b. [I (*l*) ... [I *a* [N]]]
- c. [I (*l*) ... [I $\nearrow$ [Q *s* [N]]]
- d. [I (*l*) ... [I *a* [Q *s* [N]]]
- e. [I *l* ... [Q *i* [I [N]]]]

The nominal properties of accusative clitics require insertion in the N position of the clitic string. In virtue of its quantificational properties, we expect *li* to be inserted in a higher position as well, as it indeed is when it combines with accusatives. Given that R alternates with N as a possible insertion point for *l* clitics in other dialects (Iacurso), we can identify the high position of datives with R. On the other hand, its nominal properties should also allow for insertion in N. We have direct evidence for this possibility in cases such as (40a), in which the dative is preceded by the partitive. If the dative was inserted in R we could expect the partitive to normally insert in N and therefore to follow it, as it follows other clitics such as those of the P series in examples like (40b). We take it that the order observed in (40a) can only be explained by assuming that the partitive lexicalizes R, but it does so because the dative itself inserts in N.

(40) *Gavoi*

- a. nde li 'da ʔ a 'du ʔ s
 of.them to.him he.gives two
- b. ti nd ʔ 'da ʔ a 'du ʔ s
 to.you of.them he.gives two

The points of insertion of the clitics in (39) are therefore as indicated in (39').

(39') *Gavoi*

(l)u, (l)a, (l)ɸs, (l)as → N

li → R, N

What is immediately relevant for present purposes is that the clustering of dative and accusative is impossible with the dative and the accusative both lexicalized by *l* clitics, as indicated in (41). This is explained by our theory of mutual exclusions as due to the fact that the *l* head of the clitic lexicalizes nominal reference properties for the whole string. Once inserted an *l* form, insertion of a second *l* form is therefore excluded. At the same time, in analyzing the Iacurso dialect, we proposed that the insertion of the accusative for the dative, but not viceversa, is due to the fact that lexicalization of the internal argument requires that of nominal class properties present only on the accusative. The Gavoi dialect represents an even more transparent solution to the same set of requirements. Thus its morphology allows it to lexicalize only the nominal class properties for the accusative, while the dative lexicalizes distributivity as well as nominal *l* properties for the whole string.

(41) *Gavoi*

*li lu/la/lɸr/lar 'daʔa
to.him it-m./it-f./them-m./them-f. he.gives

4. 'Opaque' forms

In what precedes we have considered in some details languages where the cluster subject and object is simplified to a single clitic, which would be described in traditional terms as the object; similarly

the cluster of dative and accusative is simplified to the accusative. However the literature on Romance languages typically considers cases where the mutual exclusion between two clitics leads to either the replacement of one of the two by a different form (see section 5) or to the emergence of what Bonet (1995) calls an opaque form. In particular Harris (1994), Bonet (1995) show that in the Catalan dialect of Barcelona (Barceloní) the cluster of accusative and dative (singular) does not surface as such, but as a single form *li* corresponding to the dative in isolation. In terms of the analysis of these authors, however, *li* is not simply the dative form in such case but rather a single lexicalization for the complex of abstract morphosyntactic features associated with the whole dative-accusative cluster, i.e. what an 'opaque' form. In what follows we shall discuss cases of this kind in Italian dialects. As before, we shall however begin by considering object for subject phenomena, rather than dative-accusative clusters.

4.1 'Opaque' forms in subject exclusion contexts

In dialects of the Lombardy region such as Castiglione d'Adda in (42) the 3rd person subject clitic is lexicalized in isolation or in combination with a P object clitic, as illustrated in (42a) for the singular and in (42b) for the plural. Furthermore a P subject clitic is lexicalized when in combination with a 3rd person object clitic, as in (42c). However Castiglione d'Adda excludes the combination of a 3rd person subject clitic with a 3rd person accusative as in (43); the presence of an additional P clitic is irrelevant to the mutual exclusion as in (44). The dialect of Castiglione d'Adda is different from that of Tavullia in that the mutual exclusion characterizes all 3rd person clitics, including the plural. But another difference that emerges from (42)-(44) is actually more striking. In particular the data in (43a)-(43b) show that in contexts excluding the subject clitic, the singular object clitic takes the invariant form *la* whether it is interpreted as feminine or masculine. This contrast with (42c) where the masculine and feminine forms are clearly distinguished in the context of a P subject clitic. In a framework such as Bonet's (1995), the *la* clitic in (43)-(44) could therefore be described as an opaque

form. Similarly, the plural is apparently inflected by a final *a*, taking the form *ia* rather than the form *i* in (42b)-(42c).

(42) *Castiglione d'Adda* (Lombardy)

- a. el/la me ✂t●ama
he/she me calls
- b. i me ✂t●amu↓
they me call
- c. t el/la/i ✂t●ami
you him/her/them call

- (43) a. la ✂t●ama
him/her he.calls
- b. la ✂t●amu↓
him/her they.call
- c. ia ✂t●ama
them he.calls
- d. ia ✂t●amu↓
them they.call

- (44) a. me la 'daʔ
to.me it they.give
- b. m ia 'daʔ
to.me them they.give

In other words, the dialect of Castiglione d'Adda excludes the combination of two 3rd person forms of the type in (45), which do not appear in our data:

(45) *Castiglione d'Adda*

- a. *el/la el/la/i 't^hama
 he/she him/her/them calls
- b. *i l/la/i ✂t^hamu↓
 they him/her/them call

The fact that *la* is restricted to the feminine in contexts without mutual exclusion, but ranges over all nominal classes in mutual exclusion contexts, is confirmed for instance by the data in (46). Thus in the mutual exclusion context in (46c) the *la* form can combine with an adjective agreeing in the masculine or in the feminine, whereas in (46b) it can only combine with an adjective agreeing in the feminine.

(46) *Castiglione d'Adda*

- a. t el vedi strak/*straka
 you him see tired-m./tired-f.
- b. t la vedi straka/*strak
 you her see tired-f./tired-m
- c. la ✂ved strak/ straka
 him/her he.sees tired-m./tired-f.

The subject clitics that are lexicalized by Castiglione d'Adda in isolation or in combination with P clitics are *el* for the masculine singular, *la* for the feminine singular, *i* for the plural, which also surface as object clitics in the presence of P subject clitics. The evidence at our disposal suggests that both singular and plural object clitics are inserted in N, while subject clitics appear in D position, since object clitics follow P clitics while subject clitics precede them, as in (47a). The conclusion that *la/ia* forms are inserted in N extends furthermore to examples of the type of (43)-(44). To begin with, the number properties of such forms (singular or plural) are interpreted as

attaching to the internal argument, not to the subject. What is more such forms follow the P clitic in (44), indicating an N position for them, as in (47b):

(47) *Castiglione d'Adda*

a.	D _{Op}	D	R	Q	P	Loc	N	I
		<i>el/ la</i>			<i>me</i>			<i>t[♂]ama</i>
b.	D _{Op}	D	R	Q	P	Loc	N	I
					<i>me</i>		<i>la</i>	<i>da[♀]</i>

The mutual exclusion of 3rd person clitics in (45) follows if the lexicon of Castiglione d'Adda is analogous in relevant respects to that of Tavullia; in other words, insertion of an *l* clitic in the N position lexicalizes Definiteness for the whole string preventing ri-lexicalization of an *l* clitic in D. Because insertion of an *l* clitic in the N position satisfies the Definiteness requirement of the entire string, it induces what is in effect a null subject behavior. Viceversa insertion of an *l* clitic in D excludes that of an *l* clitic in N but cannot subsume it. This is because *l* in D lexicalizes Definiteness for the whole string, but not nominal class properties, which according to our hypotheses, must be independently lexicalized for the internal argument.

We begin by considering the internal structure of the relevant clitics. In the plural, Castiglione d'Adda differentiates between *i* and *ia* for the mutual exclusion context. We identify the *i* morpheme with a Q category, as in (48c). The *ia* form is best analyzed as resulting from the combination of *i*, analyzed as before, and of the nominal class morpheme *a* lexicalizing the lower I in a biphrasal structure, as in (48d). Turning to the singular, the masculine *el* coincides with the pure nominal head without inflection, as in (48a). On the contrary the feminine *la* results from the combination of the nominal base *l* with the inflectional base *a*; the latter is of course the same which

appears in *ia* and is therefore to be construed as nominal class morpheme, rather than as a gender morpheme in the traditional sense of the term, as in (48b). It is worth pointing out that the majority of Northern Italian dialects, have a single nominal class inflection, i.e. *a*. Indeed nouns and adjectives as well as articles have no inflection in the so-called masculine singular and the pure Q ending *i* in the plural, at least in some residual cases. This inflectional systems holds at least for clitics in the dialect of Castiglione.

(48) *Castiglione d'Adda*

- a. [_I *el* [N]]
- b. [_I *l* ... [_I *a* [N]]
- c. [_Q *i* [I [N]]
- d. [_Q *i* [I ... [_I *a* [N]]]

Consider (43a)-(43b) in which *la* is inserted in N as the singular object clitic in the presence of a 3rd person verb, hence in the case in which we have taken the *l* morpheme to lexicalize the D position of the string. We propose that the obligatory presence of the *a* morpheme reflects a requirement that a nominal class base, represented in this case by *a*, be lexicalized as well. This requirement is connected precisely to the fact that in mutual exclusion contexts the *l* head of the N clitic lexicalizes Definiteness properties of the whole string; the nominal class head, i.e. *a*, represents therefore the dedicated lexicalization of the internal argument. Similarly in the plural the two clitics *ia* and *i* differ in that the *i* clitic does not lexicalize a nominal head, but only the functional Q specification, while *ia* has nominal content provided by the nominal class morpheme *a*. We may assume that this is at the basis of the insertion of *ia* in the N position of mutual exclusion contexts. Insertion in this position requires the presence of a nominal class head in the internal structure of the clitic, which is provided by *a*.

In contexts where the D position is lexicalized by a subject clitic, for instance a P clitic, the

N position is normally filled by the *el/la/i* series; we shall return shortly to the fact that *la* in this case is restricted to the so-called feminine. Similarly the *el/la/i* series lexicalizes the D position, yielding the overall schema in (48') for the insertion of clitics:

(48') *Castiglione d'Adda*

el, la, i → D, N

ia → N

As we noted in the presentation of the data, *i* in the Castiglione d'Adda dialect is always in complementary distribution with the other clitics in (48), differing in this from *i* in the Tavullia dialect. We account for this, assuming that the pure Q morpheme *i*, insofar as it is interpreted as the plural specification of a nominal base, is treated as a nominal clitic, equivalent in all respects to clitics involving a nominal lexical base *l*. This correlates with the fact that the *i* clitic does not lexicalize the distributor (dative). There is in fact no 3rd person lexicalization for the dative form in this dialect, but rather dative contexts present a locative form, as illustrated in (49). For an analysis of this and similar patterns we refer the reader to Manzini and Savoia (in press).

(49) *Castiglione d'Adda*

a. i ge ʔdaʔ ʔkwɛst

they there give this

b. ge ʔmeti la ʔsa:l

there I.put the salt

One aspect of the analysis to be clarified concerns the treatment of *la*, which does not coincide with the traditional feminine gender specification in mutual exclusion contexts, though it does in other contexts. We have already argued in section 1.3 that there is no functional

specification of gender, to parallel categories such Q for plurality, or D for definiteness; this correlates with the fact that while categories such as number or definiteness have denotational import, gender does not and can only be construed as a nominal class marker. In these terms, the problem regarding *la* is that in contexts where the presence of *a* is required by the verb as a lexicalization of nominal class content, it is not restricted to agree with nominal, adjectival and other elements belonging to the nominal class traditionally labelled as feminine. On the contrary, when the presence of *a* is not required to mark nominal class content, it again agrees with nouns, adjectives and other elements belonging to the traditional 'feminine' class. We assume therefore that if the presence of a nominal class head *a* is required by the lexicalization conditions on N, as in mutual exclusion contexts, its reference is allowed to range on all nominal classes. On the other hand, in contexts where no restriction is present on the lexicalization of N (or D), the range of *a* is restricted to one particular nominal class. These conclusions are consistent also with the appearance of *a* in the plural clitic form *ia*.

Our analysis explicitly eliminates a number of hypotheses that can potentially be entertained on the object for subject phenomenon and are in fact reflected by current descriptions of the facts. In particular, some Lombardy dialects with substantial affinity to Castiglione d'Adda allow us to show that 'opaque' object clitics emerge independently of the existence of subject clitics in the language. This shows that the phenomena of mutual exclusion and 'opacity' cannot be analyzed in terms of the competition of morphologically similar forms or of the competition of such forms for the same position. Quite simply an abstract syntactic solution is imposed by the fact that there is no subject clitic to compete with the object clitic or to fuse with it into an 'opaque' form.

Consider for instance the dialect of Como. The interesting peculiarity of this dialect is that the lexicalization of the subject is subsumed by the verb inflection in the 3rd person plural as in (50b), though a subject clitic is inserted in the singular, as in (50a). On the contrary object clitics in 1st or 2nd person contexts present the *l/la/i* paradigm familiar from Castiglione d'Adda. Despite the absence of lexicalized subject clitics in any context, the Como dialect exactly as the Castiglione

d'Adda dialect, restricts the lexicalization of the singular object clitic to the *la* form in any 3rd person context, ie. not only in the singular as in (51a) and (52a), but also in the plural, as in (51b) and (52b). Note that the plural object clitic in 3rd person contexts take the form *ia* as in (51c)-(52d), though as we have seen it is the *i* clitic that appears in 1st and 2nd person contexts as in (50c). The lexical entries of the Como dialect are therefore exactly as detailed in (48) for Castiglione d'Adda.

(50) *Como* (Lombardy)

- a. al/ la $\text{X} < d \text{ } \text{rma}$
he/she sleeps
- b. $\text{X} < d \text{ } \text{rma} \text{ } \text{}$
they.sleep
- c. t al/la/i $\text{X} < t \text{ } \text{am} \text{ } \text{t}$
you him-m./him-f./them call

- (51) a. la $\text{X} < t \text{ } \text{ama}$
 him/her he.calls
- b. la $\text{X} < t \text{ } \text{ama} \text{ } \text{}$
 him/her they.call
- c. ia $\text{X} < t \text{ } \text{ama}$
 them he.calls
- d. ia 't $\text{ } \text{ama} \text{ } \text{}$
 them they.call

- (52) a. ma la $\text{X} < da$
 to.me it he.gives
- b. ma la $\text{X} < da \text{ } \text{}$
 to.me it they.give

In order to account for the Como data, it is necessary to open a brief parenthesis on the exact nature of the null subject phenomenon, that we have only informally referred to in the preceding discussion. In particular following intuitions of traditional grammar, developed by generative treatments from Taraldsen (1978) to Pollock (1996), we can think of the null subject phenomenon as strictly connected to the nature of the nominal inflection (i.e. the so-called agreement) of the verb. In section 1.1 we have already introduced the idea that the clitic string repeats itself identical in all of the different verbal domains, as schematically illustrated in (6). In particular therefore the D position will repeat itself to the right of the verb in I, in the position that we have associated with subject clitics, but also to the right of the verb in I, as illustrated in (53). Based on this structural hypothesis, Manzini and Savoia (forthcoming) associate the verb and eventually its temporal inflection with the I position of the sentence, but assume that its nominal inflection lexicalizes the D position of the clitic string immediately to its right. In this perspective, the null subject or non-null subject nature of a given language appears to depend on properties relating to the lexicalization of a given clitic domain; thus non-null subject languages require the lexicalization of D of the higher domain (the clitic domain proper), while a null subject language does not.

(53) [D ... [I [D_{Op} [D ... [V

In a language like Como, which is similar in this respect to many Northern Italian dialects, the null subject property concerns only some forms of the verbal paradigm. This suggests that the lexical properties of the relevant clitics are involved. To begin with, we suggest that the *-a* ending of 3rd person singular is a pure N form; on the other hand the *-an* ending of 3rd person plural has the same *-a* morpheme followed by an *-ŋ* morpheme specialized for plurality (in the 3rd person) hence can be assigned in present terms to the category Q. It is natural to assume that in the 3rd person singular, an *l* clitic form lexicalizes domain-specific properties, which lead to its insertion. On the contrary the *i* clitic corresponding to the 3rd person plural reference does not lexicalize any domain-

specific properties, i.e. any properties not independently lexicalized by the *-a* inflection of the verb.

We can now return to the lexicalization of *la* and *ia* accusative forms not only in mutual exclusion contexts proper, as in the 3rd person singular, but also in the 3rd person plural, which has the null subject property. This distribution supports our conclusion that while *l* or *i* respectively lexicalize Definiteness properties for the whole string, the presence of the *a* morpheme corresponds to a requirement on the lexicalization of nominal class properties specifically connected with the internal argument.

4.2 'Opaque' forms in object exclusion contexts

As anticipated in the introduction to this section, in some languages, clusters of accusative and dative appear to reduce to the clitic form that also lexicalizes the dative in isolation. Languages of this type, known in the literature from Barceloní (Bonet 1995) also include some dialects of the Abruzzi such as Mascioni in (54)-(55). The clitic inventory of this language includes a *lu/la/li/le* series for masculine singular, feminine singular, masculine plural and feminine plural respectively to which is added a *lo* form for the neuter, as illustrated in (55a)-(55b). The *li* clitic furthermore lexicalizes the dative as in (55c). Two *l* clitics cannot be combined, one as an accusative and the other as a dative; instead we find the form *li* as in (55a). As in most other dialects considered so far, the accusative follows other clitics, for instance P clitics, with which it normally combines, as in (55b). Interestingly, however, the dative can also be shown to follow the clitics it combines with, in particular the partitive as in (55c), whereas the partitive itself typically follows other clitics such as those of the P series as in (55d).

(54) *Mascioni* (Abruzzi)

a. *lo* 'iko

- it I.say
- b. lu/la/li/le ✕camo
him/her/them-m./them-f. I.call
- c. li a k'kwe♦to
to.him he.gives this
- (55) a. li 'a
to.him.it he.gives
- b. me lo 'a
to.me it he.gives
- c. ne li a d'du
of.them to.him he.gives two
- d. me ne a d'du
to.me of.them he.gives two

The evidence in (55) points to the conclusion that both the accusative and the dative have N as their insertion position in the dialect of Mascioni. Thus the accusative follows all other clitics with which it cooccurs, including the P clitics, yielding structures of the type in (56a), analogous to those reviewed above for other Italian dialects. However on the evidence of (55c), the dative also follows the clitics with which it cooccurs, and in particular the partitive. As we have suggested in connection with Gavoi, if the dative was inserted in Q we could expect the partitive to normally insert in N and therefore to follow it, as it indeed follows P, Loc and *si*-type clitics. We take it that the order observed in (55c) can be explained by assuming that the partitive lexicalizes R, but it does so only because the dative is itself inserted in N, as illustrated in (56b).

(56) *Mascioni*

- a. D_{Op} D R Q P Loc N I

						<i>me</i>	<i>lo</i>	<i>a</i>
b.	D _{Op}	D	R	Q	P	Loc	N	I
			<i>ne</i>				<i>li</i>	<i>a</i>

As for the internal structure of the *lo/lu/la/li/le* series, following the analyses proposed throughout, we associate the *l* morpheme with the nominal head of a constituent, which in this dialect systematically embeds a vocalic inflection. The gender morpheme *a* is the lexicalization of I of its own nominal constituent as in (57c). Furthermore Mascioni, like other dialects of Central Italy, specifically of the Abruzzi area, distinguishes in the singular between neuter and masculine. There is evidence that the *u* morpheme of the masculine fills the pure N specification, as in (57a); in particular, the past participle surfaces as a masculine in contexts traditionally described as non agreeing, but treated by Manzini and Savoia (2001b) as implying N agreement. The *o* morpheme of the neuter may therefore be treated as gender morpheme, i.e. technically as a lexicalization of I, as in (57b). As for *le*, we treat *e* as yet another nominal class morpheme; thus for the feminine, plurality is denoted by a change in nominal class, as in (57e), rather than by a plural morpheme proper. On the contrary *i* seems to be appropriately treated as a Q category, as in (57d), being associated either with plurality, as when it lexicalizes the descriptive accusative masculine plural, or with distributivity, when it lexicalizes the dative (for all numbers and genders).

(57) *Mascioni*

- | | | | | |
|----|-------------------------|-----|-------------------------|----------------------------|
| a. | [_I <i>l</i> | ... | [I | [_N <i>u</i>]] |
| b. | [_I <i>l</i> | ... | [_I <i>o</i> | [N]] |
| c. | [_I <i>l</i> | ... | [_I <i>a</i> | [N]] |
| d. | [_I <i>l</i> | ... | [_Q <i>i</i> | [I [N]]]] |

e. [₁ *l* ... [₁ *e* [N]]]

In a dialect such as Mascioni the mutual exclusion of two clitics of the *l* series does not require any recourse to idea that the insertion of one of these clitics lexicalizes properties of the whole string; indeed the cooccurrence of dative and accusative is blocked by the simple fact that they insert in the same position N for which they compete. In other words, there is a unique insertion point for the whole *l* series, as in (57'). This is not surprising, in that in general we have seen that datives inserted in Q have either a pure *i* morphology (Olivetta, Tavullia) or a specialized consonantal head (**li** of Vagli). Clitics comprising an *l* head and an *i* morpheme lexicalize N (Iacurso, Gavoi, Mascioni itself) and eventually R. The R alternative is open in the Gavoi and Iacurso languages, but not in the Mascioni one.

(57') *Mascioni*

lo, lu, la, li, le → N

The interesting point about Mascioni is the lexicalization of the *li* form in contexts implying a dative-accusative interpretation. The structure for *li* of Mascioni in (57d) includes a Q specification, that can be associated with number or with distributivity (dativity) as well as a nominal *l* head associated with what is traditionally known as 3rd person reference. Among the clitics in (57), on the other hand, *li* is the only one not to include a nominal class specification. Our idea is that insertion of *li* in the N position, on the one hand entails lexicalization of the *l*, i.e. 3rd person properties, for the whole string; on the other hand it specifically lexicalizes through *i* the distributivity property. Thus *li* in a dialect like Mascioni is compatible with the dative - accusative interpretation in that *l* can lexicalize multiple 3rd person referents, while *i* introduces the distributive interpretation that we have identified with dativity. On the contrary insertion of a *lu/lo/la/le* form can only be interpreted as introducing reference to an accusative object, in that they lack the

distributor in their internal structure.

It is particularly useful to compare in this respects the two dialects of Iacurso and Mascioni, which even superficially appear to make specular choices, in that Iacurso simplifies the cluster of dative and accusative to the accusative, while Mascioni simplifies it to the dative. In fact, both dialects have the property that the *l* head lexicalizes properties of the whole string and hence gives rise to a potential 3rd person cluster reading. However while Iacurso enforces the lexicalization of N properties through the nominal class morpheme, the Mascioni dialect enforces lexicalization of the distributor. This parametric choice is primitive and therefore learned.

5. 'Spurious *se*' type phenomena

The discussion that precedes has not touched on what is perhaps the best known instance of the dative-accusative mutual exclusion pattern in Romance languages, namely the fact that in languages like Spanish, the incompatibility of accusative and dative leads to the apparent substitution of the dative with the *se* clitic, corresponding to Perlmutter's (1972) 'Spurious *se*' rule (see also Bonet 1995, and in an optimality framework Grimshaw 1997). If the discussion in sections 3-4 is correct, the mutual exclusion between accusative and dative is to be explained by the properties of certain clitics, or clitic subconstituents, to lexicalize properties of the whole string. Nevertheless, in sections 3-4 the mutual exclusion between two clitics is resolved in favor of one of them, or of a specialized lexicalization of one of them, as in the case of Castiglione d'Adda's or Como's *la/ia*. In the case of the 'Spurious *se*' phenomenon it remains for us to account for the apparent substitution of one clitic (the dative) by another one.

In this respect, the crucial observation is that the strings produced by this apparent substitution independently exist in the language with a different interpretive value; thus the *si*-clitic followed by an accusative will independently exist in Spanish with the value of a reflexive. Furthermore, though the substitution pattern systematically studied in the generative literature

involves the *si*-type clitic, as in Spanish, the study of Italian dialects reveals additional possibilities analyzed in detail by Manzini and Savoia (in press). The most robustly attested substitution patterns involves the locative for the dative in combination with the accusative. A few dialects replace the dative in combination with the accusative with a *ne*-type partitive clitic, while others pattern with Spanish in replacing the dative with *si*.

The conclusion that mutual exclusion between accusative and dative is a phenomenon independent of the apparent substitution of the dative by other clitics is crucially supported by the observation that all of the clitics that apparently substitute for the dative in clusters with the accusative, in reality surface in other languages as the lexicalization of the dative in isolation as well. An example of an Italian dialect in which the dative does not have a 3rd person lexicalization, but surfaces in all cases as a locative is provided by Castiglione d'Adda in (49). Though this is the most frequently attested pattern again, there are also several dialects in which the partitive or the *si*-type clitic surface in all contexts lexicalized in other languages by a 3rd person dative, as shown by Manzini and Savoia (in press).

Among Italian dialects, the spurious *se* pattern is attested by Sardinian ones. The essential data for the dialect of Làconi are reproduced in (58). The language has a specialized dative form which emerges in isolation, as in (58a), different from the accusative paradigm, illustrated in (58b). In combination with an accusative the dative interpretation is however conveyed by the *si* clitic, as in (58c). Both the accusative clitic and the dative clitic appear to follow all other clitics, such as the P clitic or the partitive in (58d)-(58e).

(58) *Làconi* (Sardinia)

a ⑧⑧i a kʒkustu
 to.him he.gives this

b. ⑧⑧u/ ⑧⑧a/ ⑧⑧uzu/ ⑧⑧aza bʒbiu
 it-m./it-f./ them-m./them-f. I.see

- c. *si* ⓈⓈu ✂aʔa
 to.self it he.gives
 'He gives it to him'
- d. *mi* ⓈⓈu 'aʔa
 to.me it he.gives
- e. *ndi* ⓈⓈi a d'duaza
 of.them to.him he.gives two

The analyses that precede provide us with a basis for the systematization of both the clitic inventory and the insertion positions involved in a dialect like Làconi. The evidence concerning the position of both accusative and dative clitics is compatible with the conclusion that the insertion point of both clitics is N. This explains the fact that they surface to the right of all other clitics, including P clitics which precede the accusative as in (59a), and the partitive clitic which precedes the dative as in (59b). Note that in keeping with the conclusions regarding Gavoi, in (59b) the position of the partitive has been taken to be R; the argument that the dative is in N is particularly strong in cases of clusters such as (59b) since, if the dative could be inserted in a higher position in the string, we could expect the partitive itself to occur in N and thus to follow the dative. The *si* - accusative cluster can simply be assigned the structure in (59c) where *si* occupies the Q position, in consonance with the discussion in section 1.

(59) *Làconi*

- | | | | | | | | | |
|----|-----------------|---|---|---|-----------|-----|-----|-----|
| a. | D _{Op} | D | R | Q | P | Loc | N | I |
| | | | | | | | | |
| | | | | | <i>mi</i> | | ⓈⓈu | aʔa |
-
- | | | | | | | | | |
|----|-----------------|---|---|---|---|-----|---|---|
| b. | D _{Op} | D | R | Q | P | Loc | N | I |
| | | | | | | | | |

			<i>ndi</i>				$\textcircled{3}\textcircled{3}i$	<i>a</i>
c.	D _{Op}	D	R	Q	P	Loc	N	I
				<i>si</i>			$\textcircled{3}\textcircled{3}u$	<i>a</i> $\textcircled{3}a$

As for the lexical entries of 3rd person clitics, we note that Sardinian dialects in general, and the Làconi one in particular, have a fully specified sets of clitics corresponding to the accusative and dative paradigm. What is especially interesting is that as for Gavoi in section 3.2, there is no lexical overlapping of dative and accusative. Let us begin with the accusative paradigm. The $\textcircled{3}$ morpheme, which we analyze as an I head within the clitic constituent, combines with *u* and *a* morphemes for the masculine and feminine singular respectively, which we in turn analyse as heads of an embedded nominal. To $\textcircled{3}a$ and $\textcircled{3}u$ can in turn be added the plural morpheme *s*; the latter will be identified with a lexicalization of Q, as in (60c)-(60d). The *a* morpheme is treated as an I, i.e. a nominal class (gender) morpheme, as in (60b), while considerations pertaining agreement (in particular of the past participle) lead Manzini and Savoia (forthcoming) to analyse *u* as an N element, yielding (60a). It remains for us to consider the dative. In this case as well, we find the I morpheme $\textcircled{3}$ followed by a morpheme *i* which we may take to be specialized for distributivity. Because of this we associate *i* with Q, as in (60e); the noteworthy property of the Làconi dialect in this respect is that it has two separate lexicalizations for plurality, i.e. *s*, and for distributivity, i.e. *i*. Nothing in principle prevents *i* and *s* from combining, and indeed they do combine in a dative plural clitic which takes the form illustrated in (60f).

(60) *Làconi*

- | | | |
|----|--------------------------------------|---|
| a. | [_I $\textcircled{3}$... | [_N <i>u</i>]] |
| b. | [_I $\textcircled{3}$... | [_I <i>a</i> [_N]]] |
| c. | [_I $\textcircled{3}$... | [_I <i>u</i> [_Q <i>s</i> [_N]]]] |

- d. [_I @ ... [_I a [_Q s [N]]]]
- e. [_I @ ... [_Q i [I [N]]]]
- f. [_I @ ... [_Q i [I [_Q s [N]]]]

The lexical properties of the clitics in (60), in particular the fact that they correspond to a full noun phrases including a @ nominal head, induce insertion into the N position. This holds also for the @i/ @is forms which embed a Q specification, evidently not sufficient to induce insertion in Q. Remember that in discussing the Mascioni data in section 4.2, we suggested the tentative generalization that insertion in Q is limited to purely quantificational clitics (hence *i* of Olivetta, Tavullia, **●***i* of Vagli). The high insertion point observed for *l* dative forms in dialects such as Iacurso and Gavoi coincides with R; but the availability of this latter insertion point for *l* clitics is independently parametrized (accounting for the position of whole accusative series of Olivetta among other things). Given the single insertion point N for the whole series in (60), as indicated in (60'), the mutual exclusion between accusative and dative can be attributed to the fact that they compete for the same position. Either one can be inserted in N, but if the accusative is inserted then the dative is excluded, and viceversa.

(60') *Làconi*

@u, @us, @a, @as, @i, @is → N

What interests us here directly is that the mutual exclusion between accusative and dative results in the apparent substitution of the dative by the *si* clitic. In order to understand this phenomenon we must first of all go back to the fundamental characterization of *si* in section 1. as a free variable. The categorization of *si* as a Q element straightforwardly predicts the existence of strings where *si* in Q is followed by the accusative inserted in N, as in (59c). Its semantic characterization as a quantificational variable furthermore implies the possibility of the impersonal

interpretation, i.e. a generic interpretation, as well as of the reflexive interpretation, whereby the reference of *si* is fixed by an antecedent. This interpretation is indeed systematically available in clusters with the accusative; thus a string like (58c) is potentially ambiguous between "he gives it to him" and the reflexive "he gives it to himself". The ambiguity between the reflexive interpretation of *si* and the non-reflexive dative is more evident in contexts such as (61), where both are equally salient

(61) *Làconi*

si ⑧ ⑧az a ssamu ✕ na ʔaza
to.him/to.himself them he.has washed
'He has washed them (e.g. his own/somebody else's hands)'

The remaining questions is how *si* also yields a distributive (dative) interpretation; and furthermore why the reflexive reading remains available in contexts where there is no accusative clitic, while the non-reflexive reading is impossible. That these questions are separate is shown precisely by existence of dialects, alluded to in what precedes, where the *si*-type clitic lexicalizes the 3rd person dative in all contexts. An example is provided by the dialect of S.Agata del Bianco in (62), discussed in detail by Manzini and Savoia (in press). While (62b)-(62c) show patterns coinciding with those of Làconi, (62a) shows that *si* lexicalizes the 3rd person dative also in isolation.

(62) *S.Agata del Bianco* (Calabria)

a. si 'ʔunanu ✕kistu
 to.him they.give this
b. s u 'ʔunanu
 to.him it they.give

c.	s	u	kʂk ^h att ^h a
	to.him/to.himself	it	he.buys

Face to data such as (62a) for S.Agata del Bianco, we are led to propose that the quantificational properties of *si* can equally well receive a distributive reading, hence conventionally a dative one. We can then go back to the question why this reading is restricted to combinations with the accusative in the Làconi dialect. From the present discussion of datives it emerges that the traditional 3rd person dative specification corresponds to the combination of two properties, namely the distributivity property with the property of 3rd person denotation, associated in a language like Làconi with the nominal base @. Now, @i combines both properties, while *si* has distributivity, given its Q nature, but does not have definite denotation. Seen from this perspective, the 3rd person dative reading is available for purely quantificational *si* only in contexts in which 3rd person denotation, in the form of a @ clitic, is independently lexicalized in N. Once again, therefore, we are proposing that the @ subconstituent of the clitic inserted in N lexicalizes its referential properties for the whole string; it is this string lexicalization properties that ultimately make it possible for *si* to have the non-reflexive distributor reading. In other contexts it remains perfectly possible to have *si* but only with its reflexive/ impersonal reading, different from that of a definite pronoun.

Crucially, if what precedes is on the right track, the phenomena routinely described as substitution of a clitic for another in a cluster are nothing of the sort. Two independent accounts are involved on the one hand for the mutual exclusion of two clitics in a string such as accusative and dative and on the other hand for the emergence of some other combination such as *si*-accusative and the range of possible interpretations associated with it.

6. Concluding remarks

The present approach is profoundly different from the others found in the literature which effectively take the routine description of the phenomenon seriously and introduce therefore some form of comparison between derivations in the grammar to account for the ‘preference’ of one clitic or another according to context. That comparison between derivations (or representations) is involved is particularly evident in the recent optimality treatment of Romance clitics by Grimshaw (1997, 1999). In essence according to Grimshaw (1997, 1999) lexical insertion takes place on the basis of the need to satisfy the maximum possible amount of constraints defined by the grammar. This means that in isolation the closest match to a 3rd person dative, in some languages a dedicated form, is inserted. If for some reason that is unavailable, the grammar provides for the insertion of a severely underspecified element such as *se*, other positively specified elements necessarily violating more constraints than it does. Essentially the same conceptual schema, based on the implicit or explicit comparison between derivations or representations is in fact implied by morphological theories that use Elsewhere as the basic lexical insertion principle, effectively the main line of generative morphology down to current Distributed Morphology frameworks (Halle and Marantz 1993).

Our account of the relevant phenomena makes use of no Elsewhere principle, with the allied notions of underspecification or default, nor of comparison between derivations/representations. It seems to us that to the extent that such notions represent an enrichment of the grammar the present account has an edge over its competitors. As for notions of comparisons of derivations or representations, recall that though they play some role in the earlier minimalist framework of Chomsky (1995) they have shown to be not only unnecessary, but to effectively derive the wrong results in more recent statements of the theory (Chomsky 1998, 1999) where they are altogether abandoned. As for notions of Elsewhere, and the attending concepts of underspecification and default, we note that these notions have been discounted in the very phonological domain in which they have first arisen (cf. the government phonology literature, e.g. John Harris 1994).

The empirical discussion in sections 2-5 proves the thesis laid out in section 1, that clitic

systems of the type found in Italian dialects, characterized both by internal complexity and by subtle parametrization, can be described by a minimalist syntax, which has no resort to comparisons between possible derivations or representations, or indeed to the choice between alternative lexical insertion patterns. This result is interesting, in that current literature almost without exception assumes that accounting for phenomena such as Romance cliticization, involves having recourse to specialized morphological components, mechanisms of underspecification and default, not to mention optimality schemas. Nevertheless the theoretical proposals that we have advanced raise interesting questions of their own. We would like to conclude our discussion by considering some of them.

We have so far adopted without any discussion the idea that clitics are ordered in rigid hierarchies; the hierarchy we proposed and used throughout specifically takes the form in (9). It is however an open question whether hierarchies, of the present type or of the type discussed by Rizzi (1997), Cinque (1999) among others, exist at all as part of the computational component. The conceptual problem most often debated with respect to such hierarchies is that they seem to subsume under phrase structure a number of properties that ought to be dealt with (and could only adequately be dealt with) at the interpretive interface of LF.

Recent theoretical reconstructions of the minimalist framework (Freidin and Vergnaud 2000, Starke 2000) explicitly integrate functional hierarchies into the computational component. They assume that Merge is an operation of set-theoretical union, whose order of application defines an intrinsic order among constituents; the latter is constrained by hierarchies (constellations for Freidin and Vergnaud 2000, f-sequences for Starke 2000), which account for observed phrase structure configurations as opposed to non-existing ones. A different approach is pursued by Manzini (1994, 1995, 1998) who explicitly proposes that the phrase structure building rule is constrained by an Interpretation Principle. The Interpretation Principle rules out any elementary constituent formed by the grammar which cannot be assigned an interpretation.

It is reasonable to think that relatively simple hierarchies, which are furthermore constant

across categorial domains, can be derived on independent grounds. Now the clitic hierarchy provided in (9) is of this second type. In particular we have emphasized the parallelism between the inflectional clitic hierarchy and the functional hierarchies within the DP; in essence D- Q - N represents both the basic order of clitics in the sentence (nominative . dative - accusative) and the basic progression of categories in the noun phrase (definite determiner - numeral quantifier - noun). At the same time it is not difficult to find interpretive reasons for the order observed. Thus the ordering of Q, D with respect to N is motivated by their quantificational/ denotational nature, binding a variable in the argument structure of N (as originally proposed by Higginbotham 1985). The relative order of D with respect to Q is simply that of definite or strong quantifiers with respect to weak or existential ones, with which they can combine.

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