

**Unifying OCP and Minimality: mutual exclusion and doubling in morphosyntax.**

In morphology, the OCP is invoked to account in particular for the impossibility of sequence of two *l*-clitics in Spanish, yielding suppletion by *se* (Spurious *se*, e.g. Grimshaw 1997). In syntax, Minimality is invoked to explain for instance the impossibility of moving imperatives to C across negation, yielding suppletion by the infinitive (e.g. Rivero 1994). Both constraints involve mutual exclusion under (partial) identity. In this paper we argue that apparently morphological level phenomena like the Spurious *se* are best treated by syntactic means and that suppletion in the imperative is better explained without having resort to movement constraints. This paves the way for the somewhat surprising conclusion that the two constraints may be (partially) unified.

**1. The double *l* constraint.** OCP accounts of the Spurious *se* in (1) work on the basis of an Optimality/ Distributed Morphology view of lexicalization. In these frameworks, underlying structures are filled by the best candidates in lexical space. If the OCP excludes the sequence of two *l*-morphemes, then the best candidate for insertion under the dative node becomes the only clitic which does not violate its specifications, i.e. *se* (eventually via the application of an Impoverishment of the dative feature, cf. Harris 1994). In languages like French in (2) where *l*-clitics cooccur freely, they will simply not define an OCP violation.

- (1) *María \*le/se lo mandó*  
 Maria to-him/SE it sent  $\neg$ Maria sent it to him $\emptyset$
- (2) *Il la lui donne*  
 He it-f. to.him gives  $\neg$ He gives it to him $\emptyset$

One problem that the OCP approach to (1) leaves open is why only the *l*-segment would matter and why wouldn't there be at least a language/ dialect where it is complete identity that matters? Another, more significant problem is that linear adjacency is in fact irrelevant to the constraint; this can be seen in Northern Italian dialects where an *l*-object clitic excludes an *l*-subject clitic even if non-*l* clitics intervene between them, as in (3) (Tavullia, data from Manzini and Savoia 2007)

- (3) *(\*el) m la da*  
 he me it-f. gives  $\neg$ He gives it to me $\emptyset$

The analysis that we propose depends on a lexicalist view of the morphological interface, under which there is no underlying structure under which (possibly default)  $\neg$ exponents $\emptyset$  are inserted; rather syntactic structures are projected from positively specified properties of lexical items, conceived as mappings of sounds and meanings. We assume a morphemic analysis of Romance clitics along the lines of Harris (1994) so that Spanish *lo* in (1), French/ Tavullia $\emptyset$  *la* in (2)-(3) etc. are segmented in a common *l*-base followed by nominal class (gender) inflections. We impute to *l*- the basic content on introducing definite (D) denotation. We argue that it is not the (PF-level) repetition of the same morpheme that triggers mutual exclusion but the (LF-level) operator content of *l*- . Specifically we propose that D morphology has scopal properties and the minimal domain of *l*- is the sentence, hence the entire clitic string. It is this property that licences the insertion of *se* in (1). The reflexive/ impersonal properties of the latter are most usefully construed as variable properties (Chierchia 1995). When read in the scope of the *l*- operator, they yield definite denotation. In other words, in (1) the single *l*- form lexicalizes D properties for the entire string. No default, Impoverishment, Late Insertion or competition in constraint satisfaction need (or can) be involved at any point; and notions such as inflectional identity or adjacency are predicted to play no role.

We take similar conclusions to hold for the simpler case in (3) where mutual exclusion does not yield suppletion. By contrast, the compatibility of several *l*- forms in (2) indicates that the economy implied by (1) and (3) (roughly, one lexicalization suffices) does not hold in French.

**2. V-to-C.** Consider imperatives, which we construe as inserting in a (high) C position (Rivero

1994), on the basis of facts such as the triggering of enclisis  $\acute{o}$  where enclisis corresponds to the verb moving past the clitics located in the inflectional domain (Kayne 1991). Negating an imperative can have three different effects, illustrated with Italian in (4) and (5). First, negation may have no effect: the imperative still moves to C, as (4a), yielding enclisis. Second, negation may block verb movement, in which case the imperative simply sits in its I position preceded by clitics, as in (4b). Third, the blocking of verb movement by negation may result in suppletion in the C position, for instance by the infinitive, as in (5). A Minimality account of these data faces obvious problems when compared to parallel accounts of phrasal movement. In phrasal movement, the crossing of a negation by measure, manner and other *wh*-phrases that are sensitive to it yields ill-formedness  $\acute{o}$  i.e. no  $\neg$ repair $\emptyset$  is possible either by suppletion, as in (5), or by simple avoidance of movement, as in (4b).

- (4) a. Non mangiate-lo!  
       not eat.2pl-it                 $\neg$ Don $\emptyset$  eat(pl) it! $\emptyset$
- b. Non lo mangiate!  
       not it eat.2pl                $\neg$ Don $\emptyset$  eat(pl) it! $\emptyset$
- (5) Non lo mangiare!  
       not it eat.inf                $\neg$ Don $\emptyset$  eat it! $\emptyset$

Consider (4b). If we assume that Minimality accounts for the blocking of verb movement by negation, this is still insufficient to account for the wellformedness of the verb remaining in situ. In minimalist terms verb movement is possible only if it satisfies some feature requirement. But if so, what satisfies the same requirement in negative contexts? A way of resolving this problem is suggested by Zanuttini (1997). The idea is that if verb movement to C satisfies certain properties, say modal ones, and Neg blocks the movement of the verb because of its similar modal properties, then we could let Neg itself satisfy these properties. This yields the blocking of verb movement and at the same time the grammaticality of it remaining in situ. But consider the logic of this argument: Neg, where present, e.g. (4b), checks properties which are checked by the raising of V in non-negative contexts. If so, economy considerations are sufficient to explain why the verb is not raised, namely because it is unnecessary to do so. In other words, the preliminary step represented by the blocking of verb raising by negation under Minimality becomes redundant.

In this perspective, we argue that (4)-(5) is best accounted in a way entirely parallel to (1)-(3). In the grammar instantiated by (4a) irrealis modality properties are lexicalized both by the negation and by the imperative sitting in C  $\acute{o}$  effectively an instance of doubling, like the doubling of the *l-* morphology in French (2). In the grammar instantiated by (4b) and (5) the negation is sufficient to lexicalize properties of irrealis modality for the entire sentential domain and the same properties are not therefore independently lexicalized by the verb in C. As we fully expect given the Spanish Spurious *se* in (1), the missed instantiation of the imperative in I can lead to the insertion of an alternative form, i.e. the so-called infinitive, yielding (5).

**3. The general pattern of doubling vs. mutual exclusion.** According to the present discussion, notions of identity (mutual exclusion/ doubling) represent a strong unifying link between the OCP and Minimality, while the differences between them revolve mostly around strictly theory-internal assumptions. Thus we argue that clitic phenomena do not in fact involve an OT/ DM morphological component (cf. Kayne 2008 among others); similarly it is not clear that head movement is to be unified with phrasal movement under Minimality (cf. Chomsky 2001). As time allows, we will address the questions that this general conclusion raises, in particular concerning the primitives targeted by mutual exclusion /doubling parameters. It seems obvious that  $\neg$ functional $\emptyset$  categories are at stake  $\acute{o}$  yet this notion may not be restrictive enough. We surmise that operator properties are what is relevant: thus definiteness, irrealis, etc. provoke the relevant effects, but not nominal class (gender) etc. This may also clarify the connection with Minimality constraints on phrasal movement, namely that (partially) overlapping classes of operators are involved.