Unifying Minimality and the OCP: Local Anti-Identity as Economy.

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1. Minimality, the OCP and their repairs

The notion of identity represents an obvious link between (Relativized) Minimality in the syntax (Rizzi 1990, Chomsky 1995) and the OCP (Obligatory Contour Principle, Leben 1973) at PF. In Rizziôs (1990) formulation, Minimality prevents category X from moving to position Y in (1) across another category, say Xô, which is identical to X in relevant respects. In Chomskyôs (1995) formulation, the target position Y acts as a probe which attracts the closest goal with the relevant properties, hence Xô rather than X in (1).

(1) (Relativized) Minimality
*[Y ... [Xô... [X

In the original formulation by Leben (1973), the OCP aims at tone phenomena and blocks two identical tones, say (2), from being adjacent on the relevant autosegmental tier. In later phonological work, the OCP is generalized from the tone tier to autosegmental tiers in general, as in the following formulation by Archangeli and Pulleyblank (1994): ñA sequence of identical elements within a tier is prohibitedò.

(2) OCP
*X X

One difference between (1) and (2) is that (1) involves the syntactic notion of movement, while (2) doesnôt. Since movement is a notion defined in syntax and not in phonology, one may wonder whether there is a single underlying local anti-identity condition in grammar interacting differently with the different internal structures of syntax and phonology. One may even wonder whether this is an example of a general cognitive constraint recruited by the Language Faculty (Hauser, Chomsky and Fitch 2002, cf. Yip, this volume).

Another difference between (1) and (2) is that the result of an OCP violation is generally a repair process; for instance, in Leben (1973), the result of two H(igh) tones being adjacent is a downstep, i.e. the second tone being repaired to L(ow). By contrast, the result of violating Minimality is generally deemed to be ungrammaticality, as seen in the blocking of *wh*-movement across *wh*-phrases or other operators. This difference could be once more factored away as depending on properties of the syntactic and phonological component respectively. In fact, repair is not an admissible notion in minimalist syntax, which is based on a deterministic, no-backtracking conception of the derivation.

In this work we will concentrate on a sample of phenomena which blur the tentative distinction drawn so far. The mutual exclusion between two *l*- clitics in Spanish (3) has been modelled by a morphological version of the OCP (Harris 1994, Grimshaw 1997, Nevins 2007 among others). On the basis of the discussion that precedes we expect that the double-*l* clitic constraint of Romance admits of repairs, as it does, for instance the Spurious *se* of Spanish in (3) (see section 2.1 below).

(3) Marìa *le/se lo mandó
Maria to.him/SE it sent
ôMaria sent it to himô

The Person Case Constraint, i.e. the mutual exclusion between a $1^{st}/2^{nd}$ person clitic and a dative clitic, as in Italian (4), is however modelled in current literature by Move/Agree and Minimality (Bianchi 2005, Anagnostopoulou 2005, 2008, Rezac 2008 among others). The notion of repair must then be imported into Minimality-based, syntactic accounts, since the PCC admits of repairs, for instance the ólocativeô repair in (4) from Rezac (2006) (see section 2.1 below).

(4) *Mi gli prendono (come segretaria)
me to.him they.take (as secretary)
ôThey take me as his secretaryô

Similarly, the mutual exclusion between negation and imperatives, as in Italian (5), has been modelled in terms of Minimality applying to movement of the imperative verb to C across the negation (Zanuttini 1997 on Italian). Yet the result is not ineffability, but a repair through suppletion by the infinitive (see section 2.2 below).

(5) Non *da-/dar- glie-lo!
not give/to.give to.him it
ôDonôt give it to him!ô

Since both cliticization and imperatives involve head-movement, one may consider adopting the proposal by Chomsky (2001) that head-movement should be banished from core syntax and head (re)ordering should be treated as a PF phenomenon. However, no matter how problematic head-movement is in the syntax, its treatment as a PF-rule (specifically as Morphological Merger) is even more problematic (Manzini and Savoia 2011b, Kayne 2010 vs. Halle and Marantz 1994, Harris and Halle 2005; cf. also Roberts 2010).

Another complication is that some mutual exclusion phenomena, with the same surface appearance as those considered so far, are dealt with by the literature neither at the PF interface nor in the computational component, but at the LF interface. A case in point is Negative Concord (see section 2.3 below). In many approaches, lack of negative Concord, i.e. mutual exclusion between two negations, as in English (6a), is imputed directly to the semantic content of the lexical items involved (Zejilstra 2004, cf. Déprez 1999 on Romance). Because the LF interface is involved, rather than the PF interface, repair does not even get a mention. Rather avoidance of ineffability in, say, English by insertion of negative polarity items of the *any* series, as in (6b), is treated as a straight alternative lexicalization ï as is the omission of *not* in (6c).

(6) a. Í I donôt like nothing
b. I donôt like anything
c. I like nothing

In sections 3-5 we propose a unified treatment of double ï *l*, Negative Concord and negative imperatives (for which we provide more data in section 2). We argue that all of them are syntactic in nature. In order to avoid repairs and the global mechanisms they imply (backtracking), we further propose that these phenomena do not involve the violation of any constraint. Rather, in some languages a single lexicalization of property P per domain D suffices and P cannot therefore be iterated in D under Economy. Descriptive repairs do not represent the undoing of a violation ï rather they are simply alternative lexicalizations, licensed by the same property P and domain D that do not admit of doubling.

If the notion of repair can be avoided in all instances of local anti-identity, an important obstacle in the way of the unification of Minimality

and the (morphosyntactic) OCP is removed, given that backtracking (hence repair) is banned by the minimalist model (Chomsky 1995) and has no part in the application of Minimality. The other relevant conclusion that emerges from the range of data that we consider is that there is no obvious division of labor between Minimality in (1) and the OCP in (2) along the lines of the classical divide between PF (*qua* morphology) and syntax/LF. Local anti-identity applies to phenomena traditionally categorized as morphological (3), syntactic (5) and semantic (6) in exactly the same way, suggesting to us that these are all to be dealt with in the syntax/LF.

Some aspects of our discussion find a parallel in recent works with similar empirical concerns, despite differences in theoretical outlook[1]. Van Riemsdijk (2008) argues that Swiss German relative *wo* is subject to haplology ï yielding an instance of the descriptive Doubly Filled Comp (DFC) filter. He goes on to suggest that

> the DFC is essentially a syntactic reflex of the Obligatory Contour Principle (OCP)é Identity Avoidance, or *XX é covers both Haplology and the DFC effect on Swiss German relative clauses. But clearly, Haplology applies under strict phonological identity, while the DFC appears to be primarily sensitive to certain syntactic-semantic features such as operatorhood. This, I believe, is what one would expect if Identity Avoidance is a general principle of biological organization: its effect can be detected at both interfaces, PF and LF é
>
> Another area of syntax that might be re-examined in the light of *XX is relativized minimality (see Rizzi 199[0]). What the term *relativized* refers to in fact is the relative identity of both the element engaged in a dependency relation and the intervening element... And, in a graphic interpretation of how such a movement takes place, there is a virtual intermediate stage at which the two elements in question are also adjacenté (van Riemsdijk 2008: 241-243)

Van Riemsdijk goes on to consider Optimality Theory (for instance Grimshaw (1997) on Romance clitics) as a possible framework for the treatment of the parametrized nature of *XX constraints and, we may add, of their repairs. If the present contribution is on the right track, the relevant range of data is compatible with a minimalist organization of the interfaces ï and it does not require powerful models of variation such as OT, or even Distributed Morphology, with its costly recourse to Late Insertion.

As van Riemsdijk comments, ñthe idea that the OCP is active in syntax is not newò. In the review of syntactic haplology by Neeleman and van de Koot (2006), the generative bibliography starts with Perlmutter (1971), who discusses relevant phenomena in the Romance clitic string, including the Spurious *se* in (3). According to Neeleman and van de Koot

[1] Thanks to an anonymous reviewer for raising this point.

the environments in which [syntactic haplology processes] are triggered are characterized in both morpho-syntactic and phonological terms... This state of affairs raises the question what exactly triggers haplology in this case, repetition of phonological forms or of syntactic featuresé one would expect to find cases in which deletion or suppletion is triggered by syntactic features even though the morphemes affected are not phonologically identical in isolation (Neeleman and van de Koot 2006: §3.1)

Possible theoretical treatments envisaged by Neeleman and van de Koot for this complex of phenomena include once again Distributed Morphology (ña conspiracy é of syntax and morphologyò, e.g. Bonet 1995) and OT (Grimshaw 1997). The present thesis is that neither is necessary ï largely because the notion of repair is not. This leads us to Richards (2010), who also aims to provide a minimalist account of what he terms Distinctness phenomena. Richardsô basic idea is that

a linearization statement (Ŭ, ƀ) is only interpretable if Ŭ and ƀ are distinct from each otheré any phase in which two DPs, for example, must be linearized with respect to each other yields a linearization statement (DP, DP), which causes the derivation to crash (Richards 2010: §1)

Since Richards adopts Kayneôs (1994) LCA, a linearization statement (Ŭ, ƀ) requires c-command between Ŭ and ƀ ï as well as a position internal to the same phase[2]. Vice versa ñlinear adjacency is not only not sufficient, but also not necessary to trigger Distinctness effectsò (ibid: §2.2.2). As for repairs,

methods of avoiding Distincteness violations come in four main groups. Firsté Distinctness violations are avoided by adding extra structure... Secondé Distinctness violations are avoided by removing offending structure. Third, we will review some cases in which operations that would create Distinctness violations are blocked. And finally, we will see examples in which movement breaks up potential Distinctness violations, moving offending nodes further apart (Richards 2010: §2.4)

With respect to this last case, Richards formalizes a principle of Derivational Distinctness, as follows

Given a choice between operations, prefer the operation (if any) that causes a Distinctness violation to appear as briefly as possible in the derivation é It seems

[2] Grohmann (2011) has a different idea, namely that what he calls syntactic OCP effects fall under his anti-locality theory.

reasonable to hope that [Derivational Distinctness] and Shortest Attract could be made to follow from a single overarching constraint (Richards 2010: §2.4.4.2.3)

Apart from yet another clear statement as to the overlapping between Distinctness and Shortest Attract (in present terms Minimality), the discussion of Derivational Distinctness implies a look-ahead, since at some point in a derivation one may need to look ahead to future steps in order to make the optimal choice. This seems to be compounded by backtracking at least in the case of added structure (cf. fn. 3). If the view of the relevant phenomena that we take here is correct, look-ahead (like backtracking) is unnecessary. For the rest, it will be noted that, like Richards, we also refer to scope (or c-command) as a crucial prerequisite for the relevant effects to hold. As for the key concept of locality, the discussion that follows, though not focussed on it, implies that no rigidly defined domain is involved (i.e. phase, but see fn. 2). Rather, relevant domains are relativized much in the sense of Rizzi (1990), coinciding with the scope of the various operators involved (namely D for the clitic string, Neg, Jussive, cf. also fn. 9).

2. The data

2.1 Double-*l* (and the PCC).

In many Romance varieties *l*- clitic pronouns normally combine, as seen with a dative and an accusative *l*- clitic in Italian (7).

(7) Glielo da
to.him-it he.gives
ôHe gives it to himõ

However there are Romance languages where two *l*-forms cannot co-occur. The best known case of mutual exclusion between two *l*- clitics is between datives and accusatives in Spanish, as in (3), repeated here in (8b). While the dative clitic *le* does not surface, a different form of the clitic paradigm, namely *se* apparently takes its place, as in (8c) ï yielding a descriptive repair via suppletion (the Spurious *se*).

(8) a. Marìa le mandó un libro
Maria to-him/her sent a book
ôMaria sent a book to him/herõ
b. *Marìa le lo mandó

Maria to-him/her it sent
ôMaria sent it to him/herô

c. Marìa se lo mandó
Maria SE it sent
ôMaria sent it to him/herô

The double-*l* constraint need not be repaired by suppletion, but can also result in simple mutual exclusion. In (9)-(10) we provide examples from two Italian varieties (from Abruzzi and Lucania respectively) showing that the 3rd person dative-accusative clusters can be simplified either to dative, as in (9), or to accusative, as in (10).

(9) a. lu/la/li/le camo *Mascioni*
him/her/them-m./them-f. I.call
óI call him/her/themô

b. li a kkweʃto
to him he.gives this
óI give this to himô

c. issu li a
he to.him gives
óHe gives it to himô

(10) a. lu/la/lə/li vidənə *Aliano*
him/her/them-m./them-f. they.see
őThey see him/her/themô

b. li ða:nə (a) kwistə
to.him they.give (to) this
őThey give this to himô

c. lu/la/lə ða:nə
it.m/it.f/them they.give
őThey give it to himô

Nevins (2007) proposes that the mutual exclusion between two *l*-clitics is due to a morphological dissimilation rule, namely ñDelete/alter the features corresponding to 3rd person on a dative when it precedes another 3rd personò. In other words, ñthe presence of two identical adjacent person feature speciýcations is illicitò, as in (11) ï essentially a morphological version of the OCP.

(11) $[Cl_{[-participant]}$ $[Cl_{[-participant]}$

The Spurious *se* repair can be derived by the same Distributed

Morphology machinery of Impoverishment and Late Insertion implied by Nevinsôs dissimilation. Specifically, Halle and Marantz (1994: 283) suggest that a rule of Impoverishment deletes the feature [Dative] on a clitic, when it is in the same cluster as an accusative clitic. The only clitic of the Spanish lexicon which can be inserted under the impoverished node after Impoverishment is *se*, as it lacks Case features altogether. On the contrary, *le* could no longer be inserted because of its specification for dative, nor could the accusative clitic. The sequence that results will be *se lo* in (8c). However, since Vocabulary Insertion must follow Impoverishment, minimalist Inclusiveness, i.e. projection from the lexicon, is violated at least in its strongest form, since there are lexical properties that are fixed only at the end of the derivation.

A different reason to suspect that not all is in order comes from comparison with another mutual exclusion phenomenon in the clitic domain, i.e. the Person Case Constraint (PCC, Bonet 1994). In its strong version, the PCC involves mutual exclusion between a dative and a $1^{st}/2^{nd}$ person accusative, including (4) above, repeated here for ease of reference.

(4) *Mi gli prendono (come segretaria)
me to.him they.take (as secretary)
ôThey take me as his secretaryô

According to Rezac (2008: 68-69) the PCC is ña consequence of relativized minimality, whereby é dative X [in (12)] prevents H-Y person Agreeò. Hence in the context of X-DAT, Y is disallowed if it positively specified for [person], i.e. it is $1^{st}/2^{nd}$ person.

(12) [H [X-DAT [Y

In Rezacôs words, ñmuch work seeks to solve the riddle of this quirky partial intervention of the dativeò. For instance Anagnostopoulou (2008: 18), referring back to Adger and Harbour (2007), assumes that ñ1^{st}, 2^{nd} and reflexive pronouns are [+person] pronouns... while the person specification of 3^{rd} person pronouns depends on the type of Case they have é direct object 3^{rd} person pronouns lack person features altogether... On the other hand, 3^{rd} person dative/indirect object arguments are understood as animate/affected, they encode point of view, properties encoded through person featuresò. Because of this, the dative checks the [person] feature of *v* in (13); this prevents checking by the $1^{st}/2^{nd}$ person and ultimately yields ill-formedness.

(13) [$v_{[P]}$ [Dat [V $1^{st}/2^{nd}$P

In short, the PCC in (12)-(13) is just a double-Person/ Participant constraint. If so, one wonders why the double-*l* (i.e. -Person/-Participant) constraint in (11) should be treated in such a radically different way from it. An empirical parallelism between the two phenomena holds in practically all respects. In particular, a PCC violation can be repaired in the same ways as a double-*l* violation. In some varieties of French (Rezac 2006), inserting the locative in place of the 3rd person dative, as in (14) yields a well-formed result ï effectively an instance of suppletion. Rezac (2006) advocates a model under which the violation of the PCC is overcome in the derivation, by the merger of an ñadditional probeò checking the locative.

(14) Philippe vous y présentera
Philip you there will.introduce
ôPhilip will introduce you to himô

However, adopting the view that a violation is first introduced and then repaired is even more expensive in the syntax than in the morphology. At worst, it involves backtracking, since the derivation survives point of crashing (the Minimality violation) to achieve well-formedness. At best, it involves Late Insertion (hence a violation of Inclusiveness), since it is the derivation that decides what lexicalization the argument will have, and therefore lexicalization is forced to take place post-syntactically. In fact, Bejar and Rezac (2009: 67) are explicit on the ñlast resort, global economy flavorò of their added probes.[3]

Another repair of the PCC is possible, paralleling again double-*l* environments, and it involves the suppression of one of the members of the offending pair. Thus a conflict like the one in (4) can be resolved by introducing the 3rd person possessor as a genitive in (15), thereby eliminating the dative clitic. A clearer case of repair by obliteration may come from Kiowa, where ñwhen the verb... ôbringô takes an indirect object and a second-person direct object, the verbal agreement preýx cannot encode all three argumentsò (Adger and Harbour 2007).

(15) Mi prendono come sua segretaria
me they.take as his secretary
õThey take me as his secretaryô

[3] The addition of a head in the derivation is also one of the options suggested by Richards (2010) to resolve (potential) Distinctness violations ï in his case, the head is a phase head.

A possible difference between double-*l* and the PCC is that the double-*l* constraint is highly parametrized ï since it holds in Spanish but not in sister languages like Italian (7); on the contrary the PCC is often presented as universal. Yet, Haspelmath (2004) quotes several languages where the PCC does not hold, strengthening the parallelism with double *l-*. Furthermore, the PCC is in reality a family of constraints, which share the domain of application (clitics or agreement) and the basic form of the constraint (i.e. matching a case array to a person hierarchy), but differ in other respects. For instance, the weak PCC only prevents co-occurrence of a $1^{st}/2^{nd}$ person accusative with a 3^{rd} person dative (not a 1^{st} and 2^{nd} person one). In the same way, what we have called the double-*l* constraint does not apply in a uniform way. For instance, in Northern Italian varieties mutual exclusion is very often attested between a subject and an object *l-* clitic (Manzini and Savoia 2005, 2007).

In short, there is no obvious empirical asymmetry justifying treatments of the PCC and of double-*l* at two completely different levels of analysis. Yet the literature does not appear to perceive any problem. Thus Nevins (2007), after presenting the theory of double-*l* as dissimilation mentioned above, goes on to propose a syntactic approach to the PCC, whereby certain combinations of feature values in the domain of a probing *v* head determine ill-formedness under Multiple Agree. To our knowledge, Manzini and Savoia (2002, 2004, 2005, 2007, 2010) are alone in concluding not only that double-*l* is in fact a syntactic-level phenomenon, but also that Spurious *se* requires neither backtracking nor Late Insertion. We will illustrate these conclusions in section 3. As for the PCC, despite the heuristic role that it plays in the present discussion, we doubt that its construal as a double-Person phenomenon is correct and we therefore abandon it in what follows (see Manzini 2012 for an argument that it may be double-dative, at least in some languages).

2.2 Negative imperatives

In order to understand negative imperatives in Romance, it is necessary to recall that according to Kayne (1991), enclisis depends on the verb being higher than the clitic string (hence to its left). Following Rivero (1994), we can account for the Romance imperatives that display enclisis by assuming that the imperative is in a high position in the sentence, say in C, where it precedes the clitic string in the inflectional domain.

In some Romance languages, negating an imperative does not

involve any modification either of the imperative verb or of the enclitic order. As noticed by Zanuttini (1997), Northern Italian dialects with a postverbal negation adverb are of this type. Yet varieties of the Romagna that negate only with a clitic can also display this behaviour, as in (16). Note that here and in what follows we exemplify the 2nd person singular, which is a ótrueô imperative according to Rivero (1994), Zanuttini (1997).[4]

(16) a. tʃem-æl *S. Mauro Pascoli*
call him
óCall him!ô
b. nu tʃem-al
not call him
óDonôt call him!ô

Two alternative ways of forming negative imperatives in Romance are better known, from languages like French and Italian. In both of these languages, combining the negation with the positive imperative yields an ungrammatical result, as illustrated in (17b) and (18b). In neither language does this lead to ineffability. Rather, in French it is sufficient to switch from enclisis to proclisis to get a grammatical result, as in (17c); in Italian suppletion is necessary. Therefore the negative imperative in the 2nd person singular is formed with the morphological infinitive, as in (18c).

(17) a. Donne-le-lui!
Give it to.him
óGive it to him!ô
b. *Ne donne-le-lui pas!
not give it to.him
óDonôt give it to him!ô
c. Ne le lui donne pas!
not it to.him give not
óDonôt give it to him!ô
(18) a. Da-glie-lo!
Give it to.him
óGive it to him!ô
b. *Non da-glie-lo!
not give it to.him
óDonôt give it to him!ô

[4] This does not mean that we recognize the category of true imperatives (cf. the discussion at the beginning of section 5).

c. Non dar-glie-lo!
not to.give it to.him
ôDonôt give it to him!ô

Consider the relatively simpler case of French. By hypothesis, in the positive imperative the verb moves from I to C, as in (19a). When a negation is present in the same structure, movement is blocked, as in (19b). The original idea of Roberts (1994) was that the negation acts as an Aô-intervener on the path of Aô-head movement, yielding a Minimality violation. The characterization of the identity content, coinciding simply with the notion of Aô-position for Roberts, can of course be refined. Suppose the C position to which the imperative moves is associated with modal properties. We may want to say that the same properties (for instance non-veridicality, in the sense of Giannakidou (1998)) are found on Neg, triggering Minimality and preventing the verb from moving to C.

(19) a. $[_C$ donne $[_{Cl}$ le $[_{Cl}$ lui $[_I$ ~~donne~~
b. $[_C$ $[_{Neg}$ ne $[_{Cl}$ le $[_{Cl}$ lui $[_I$ donne

As already noted, negative imperatives are not ineffable in French. Rather, while verb movement to C is obligatory in positive contexts (i.e. proclisis is impossible), in negative imperatives verb movement is impossible (i.e. proclisis is obligatory). Zanuttini (1997: 145-146) explains this pattern in terms of Chomskyôs (1995) Minimality. She assumes that ñthe negative marker... can raise to fill the head of CP. This happens when Neg is the head closest to C: the features of the negative marker constitute the closest features to the head C; hence they are attracted é Since the negative marker satisfies the feature of C, the verb itself need not and thus cannot move to Cò. Going back to the structure in (19b), we can say that some modal feature of C acts as a probe ï since the closest goal is Neg, it is Neg that raises to C. The resulting structure is well-formed. Under this analysis, there is in fact no backtracking (descriptive repair) at all.

Let us consider however how the theory fares with respect to languages with suppletion, like Italian in (18c). Zanuttini (1997) suggests that the infinitive depends on the insertion of an abstract auxiliary. Yet she must explain why this auxiliary is not inserted in positive imperatives. To this end she postulates an abstract Mood head which needs to be checked in negative contexts. The assumption is that imperatives cannot check it, while the empty auxiliary can. In other words, Zanuttiniôs account of suppletion requires no less than two abstract categories (the empty Mood head and the empty auxiliary), of which at least the Mood head is not independently

motivated[5]. Furthermore, languages of the type of *S. Mauro* in (16) are not discussed, though Zanuttini (1997: 150) is aware of their existence.

In short, it seems fair to conclude that at least suppletion is a problem for the analysis of negative imperatives, no less than for that of clitic phenomena in section 2.1.

2.3 Negative Concord

Another facet of the problem is represented by phenomena which have the general distribution studied in sections 2.1-2.2 ï yet neither Minimality nor the OCP are normally invoked in analyzing them. One of them is so-called Negative Concord. Some languages allow for the multiple occurrence of the *n*- morphology within the same sentence with the interpretation of a single negation, for instance Italian in (20); for instance English, as in (6a). Example set (6) is repeated below for ease of reference

(6) a. Í I donôt like nothing
b. I donôt like anything
c. I like nothing

(20) Non voglio niente
not I.want nothing
ôI donôt want anythingô

Haegeman and Zanuttini (1991) model Negative Concord via head-Spec agreement in NegP, hence ultimately via abstract movement of the *n*-argument. However absence of Negative Concord in English is not taken to depend on a violation of Minimality in any literature that we are aware of. Within a minimalist framework, Zeijlstra (2004) treats Negative Concord as an instance of (Multiple) Agree between a negative operator and some element(s) with an uninterpretable negative feature. A language like English without Negative Concord can be accounted for by assuming that all *n*-constituents have an interpretable [iNEG] feature, while there are no uninterpretable [uNEG] constituents. Hence lack of Negative Concord and the mutual exclusion between *n*-words that derives from it, result simply from the different distribution of features with respect to Negative Concord languages.

Despite the different treatment, the syntactic and even morphological

[5] The empty auxiliary of Italian would parallel an overt auxiliary, visible in dialectal varieties. The problem remains that this auxiliary is never visible in Italian.

contours of the Negative Concord/double-*n* phenomenon are the same as in the double-*l* phenomenon previously reviewed. Some languages allow for doubling, as in (20), while some languages have mutual exclusion, as in English (6a). The latter does not lead to ineffability; rather the content of Italian (20) can be externalized in English in one of two possible ways. One consists in eliminating one of the *n*- words, as in (6b), the second in substituting a negative polarity item of the *any* series for one of the *n*-words, as in (6c). Looking at the entire matter without knowledge of previous literature, one may be entitled to conclude that this pattern is the same as in other repairs examined so far, yielding either simple mutual exclusion (6b), or suppletion (6c).

Another important consideration is that the double-*n* constraint may hold in different languages for different sets of configurations. For instance, French generally allows for the co-occurrence of *n*-words under the Negative Concord reading, as in (21a). Yet it disallows the co-occurrence of the sentential negation adverb *pas* ónotô with another *n*-word, as in (21b). The conflict is generally resolved by not lexicalizing *pas*, as in (22a). Alternative lexicalizations are in principle also possible, for instance by *qui-que ce soit*, literally ówhoever it beô, as in (22b).

(21) a. Personne (ne) voit rien
nobody not sees nothing
ónobody sees anythingô

b. *Il (ne) voit pas rien
he not sees not nothing
óHe doesnôt see anythingô

(22) a. Il (ne) voit rien
he not sees nothing
óHe doesnôt see anythingô

b. Je n'ai pas vu qui-que ce soit aujourdôhui
I not have not seen anybody today
óI havenôt seen anybody todayô

One may want to argue that the double-*n* constraint of English, or of French (to the extent to which it applies), is really quite different from the double-*l* constraint of Spanish, in that examples like *I donôt want nothing* in (6a) are not ungrammatical ï but only require a particular interpretation, i.e. a double negation one. Similarly French (23) is acceptable with a double negation reading (Martineau and Déprez 2004).

(23) Ce n'est pas RIEN que d'être Français
it not is not nothing that to be French
ôBeing French isnôt nothingô

This is an important objection. But consider again the logic of local anti-identity. The configuration *le é lo* in a language like Spanish is well-formed if two different clitic domains are involved and leads to ungrammaticality only in case no such two distinct domain can be construed. What happens in the English double-*n* phenomenon can be described in comparable terms. Two *n*-words are mutually exclusive in the domain of the same logical negation; if there are two *n*-words, this implies that two logical negations (two different negation domains) must be introduced.

Let us then provisionally accept that nothing stands in the way of an assimilation of double-*n* (Negative Concord) and double-*l* phenomena. What is especially interesting for present purposes is that, if lack of Negative Concord is simply modelled as a different distribution of features with respect to Negative Concord, then no constraint violation and no repair is involved in, say, French (22). Rather what insures grammaticality in (22) is simply an alternative lexicalization choice (i.e. an alternative numeration) with respect to the ungrammatical (21b). In other words, (21b) and (22) are not derivationally connected, specifically (21b) is not a step in the derivation of (22a). This is the line of explanation that we will pursue in the rest of our work.

3. Double-*l*

In order to analyse double-*l* mutual exclusions we need to understand first what is the property that *l*- lexicalizes. As mentioned in section 2.1, Nevins (2007) argues that it is the [-participant] feature, taken to provide a formal characterization for the descriptive 3rd person. Equivalently, in underspecification systems (Harley and Ritter 2002) lack of specification for the [participant] feature is interpreted as a negative specification for that feature, i.e. [-participant] again. Here however we maintain that features are privative, i.e. they are only positively specified, nor is there any underspecification.

In the light of these assumptions, consider the singular paradigm of object clitics in Italian, as summarized in (24). The 1st and 2nd person forms in (24a) are characterized by a specialized lexical base *m-/t-*, denoting ôspeakerô and ôhearerô. The 3rd person forms in (24b) have a lexical base *l-* followed by nominal class inflections *-o*/*-a*. The same lexical base *l-* turns up

as the determiner of nouns, in which case its referential value is definiteness, as in (24c); the nominal class endings *-o*/*-a* are the same seen on nouns (here *zi-* ‘uncle/aunt’).

(24) a. mi, ti
me, you
b. lo, la
him, her
c. lo zio, la zia
the uncle, the aunt

Morphological analysis then suggests that Italian clitic pronouns consist of ‘speaker’, ‘hearer’ and ‘definiteness’ properties, as well as nominal class ones, and that the *l-* base in particular lexicalizes D (definiteness). These conclusions are supported by the semantic analysis of 3rd person pronouns in Kratzer (2009: 221), according to whom “the alleged ‘‘3rd person’’ features are in fact gender features, a variety of descriptive feature... If [a descriptive feature] is to grow into a pronoun, it has to combine with a feature [def] that turns it into a definite description. If [def] is the familiar feature that can also be pronounced as a definite determiner in certain configurations, it should head its own functional projection, hence be a D. It would then not originate in the same feature set as descriptive features, which are nominal, hence N”. Manzini and Savoia’s (2002, 2004, 2005, 2007) categorization for so-called 3rd person pronouns is essentially identical, i.e. a D category for the Definiteness morphology (*l-* in Romance) embedding an N, i.e. nominal class, category for its inflection.

In short, reference accrues to 3rd person forms not through their lack of P (Participant/Person) categorization, nor through their negative P specifications – but through their positive D categorization. The logical space is partitioned not into P and not-P (i.e. [+participant] and [-participant] in conventional notation), but into P and D. In these terms, mutual exclusion between two *l-* pronouns turns out to be mutual exclusion between two D’s. That *l-* properties are involved in mutual exclusion, and not the N inflection, or the clitic as whole, is shown by the Sardinian variety in (25), where the dative *l-* clitic in (25a) and the accusative *l-* clitic in (25b) do not combine. However the dative – accusative cluster takes the form in (25c), where the *l-* dative is followed by an accusative reduced to the sole nominal class vowel.

(25) a. li ðaða ʔustu *Gavoi*
to.him he.gives this
'He gives this to him'

b. mi lu/lɔr daða
to.me it/them he.gives
'He gives it/them to me'
c. li u/ɔr daða
to.him it/them he.gives
'He gives it/them to him'

If the double-*l* constraint really targets D properties, it becomes likely that some syntactic/LF principle is involved, rather than a morphological one. Specifically, since D is an operator, certain properties can be imputed to it on the basis of what we know about operators; for instance, in LF movement terms, we may say that insertion in the clitic string of a *lo* clitic in Spanish (8a) causes D to take scope over the entire clitic string. Alternatively, using the minimalist Agree notation, one may say that each clitic domain is associated with a set of abstract operators, including D, acting as probes ï and that insertion of *lo* in (8a) values D, as in (26). In the present context, valuation of the D probe by the clitic means roughly that the clitic (or its N descriptive content, cf. the discussion surrounding (24)) values the variable introduced by D.[6]

(26) [$D_{[lo]}$ [*lo* [I

When it comes to the ill-formedness of the Spanish sequence **le lo* in (8b), nothing prevents us from setting up a Minimality model like the one proposed by Rezac (2008) for the PCC. Thus we will say that in (27), *le* values the D operator, to which it is closer, and prevents *lo* from valuing it ï presumably resulting in a violation of Full Interpretation at the interface.

(27) [$D_{[le,*lo]}$ [*le* [*lo* [I

However, two observations are in order. First, the asymmetry introduced by Minimality between the two *l*- clitics in (27) appears to be unnecessary, since a weaker, symmetric model is sufficient to yield the desired result. Assuming that D can be valued only by a single argument (as in standard Agree), valuation by *le* will block valuation by *lo*, as in (27), but also vice versa, as in (28), if *le* and *lo* are deemed to be equidistant from the probe (for instance, because they are internal to the same phase). As before,

[6] In other words, both D and the clitic play a role in interpretation. Uninterpretable features are not part of the present model (cf. Brody 3003, Manzini and Savoia 2005, 2007, 2011a).

we can then assume that Full Interpretation is not met at the interface, since (informally) scope remains unassigned to one of the two arguments.

(28) [$D_{[*le,\ lo]}$ [*le* [*lo* [I

What is more, the D probe itself in (26)-(28) is redundant. It is perfectly possible to model the mutual exclusion between two *l*-clitics in Spanish by assuming that there is a single D probe per clitic domain and that a single *l*-clitic can value it under Agree. However, by hypothesis the *lo*, *le* clitics of Spanish have the internal structure displayed in (29), consisting of a D operator and an N inflectional element. Therefore the D probe is redundant with respect to the D operator properties lexically represented by the *l*- morphology. If we eliminate the probe/Agree part of the structure, i.e. the shaded area in (26)-(29), we can still obtain the mutual exclusion between the two clitics on the basis of the simple assumption that there is at most one D operator per clitic string. So, two D operators, as in (29), are excluded. As far as we can see, the probe/Agree encoding makes no explanatory contribution. Nevertheless, in homage to the fact that is ordinarily employed by minimalist literature, we will keep a notation compatible with it.

(29) a. [$D_{[le,*lo]}$ [$_D$ *l* [$_N$ *e*]] [$_D$ *l* [$_N$ *o*]] [I
b. [$D_{[*le,\ lo]}$ [$_D$ *l* [$_N$ *e*]] [$_D$ *l* [$_N$ *o*]] [I

Recall that our aim is not simply to provide the basis for the ill-formedness of Spanish (8b), with the structure in (29), but also for the well-formedness of (8c), i.e. the so-called Spurious *se*. Treatments available in the literature make two crucial assumptions. The first one is that violation of the double *l*- constraint, as in (29), is a necessary precondition for the lexicalization of the Spurious *se*. The other key assumption is that *se* is inserted because of its impoverished feature specifications. Let us begin with this second assumption. In the discussion that precedes, we rejected the idea that 3rd person may be characterized by a [-participant] feature or by the absence of participant features, embracing instead privative (i.e. positive only) features without underspecification. If so, we will also want to reject the idea that an element like *se* may be characterized as a default, without any feature specifications, or perhaps endowed only with 3rd person features (Harris 1994) ï and capable of entering contexts as diverse as the reflexive and the Spurious *se* in virtue of this underspecification.

Manzini (1986) and Manzini and Savoia (2005, 2007, 2011a) argue in favor of a positive characterization of the denotational content of *se* in

Romance as the free variable of the clitic system. In particular, in all Romance languages *se* is associated with middle-passive voice, including passive, anticausative, reflexive and impersonal interpretations. These interpretations follow if *se* is characterized as a variable. If it is bound by an antecedent, a coreference reading (i.e. reflexive) or a chain reading (i.e. passive/anticausative) are obtained. If, in the absence of antecedents, the *se* variable is closed by a generic operator, we obtain the impersonal reading (cf. Chierchia 1995).

Consider then what happens if *se* is inserted in the context in (29) as an alternative to *le*. One possible outcome is that *se* is interpreted as a reflexive. Though this is not normally emphasized in presentations of the data, sentences like Spanish (8c) are ambiguous between the Spurious *se* reading ôMaria sent it to himô and the reflexive reading ôMaria sent it to herselfô. In this perspective, the Spurious *se* phenomenon corresponds essentially to a different interpretation of a configuration independently attested for the reflexive reading. Specifically, we propose that the Spurious *se* corresponds to a reading of the *se* variable within the scope of the D operator. The latter acts as a definiteness closure for the variable ï which is interpreted as having definite reference. If a probe/Agree terminology is preferred, one could presumably say that the D probe in (30) can be valued by both *lo* and *se*, since the latter provides only a partial valuation and does not interfere with valuation by *lo*.

(30) $[D_{[se,lo]}$ $[_Q$ *se*=x] $[_D$ *l* $[_N$ *o*]] [I

At this point, the account of Spurious *se* is no longer necessarily predicated on some form of repair, hence of backtracking/Late Insertion. The lexicalization pattern in (30) is generated and interpreted without any need for (29) to be first generated, then excluded and repaired. In other words, the well-formedness of (30) is not causally linked to the ill-formedness of (29) ï though there is a conceptual link, provided by the notion of D scoping/probing over the clitic string.

In his discussion of repairs to the PCC, Rezac (2006) is aware of the possibility that they may be treated just as óparaphrasesô, i.e. as alternative means of lexicalization. He rejects this possibility, on the basis of the observation that the supposed paraphrase is restricted to a particular context. Our discussion of Spanish (29)-(30) shows that there is no contradiction between the notion of alternative lexicalization/paraphrase and that of contextual restriction. The same environment, defined by the insertion of the definite clitic *lo*, determines the ill-formedness of (29), because of the single D operator/Agree constraint ï and also determines the well-formedness of

(30) with the non reflexive reading. For, only in the scope of an independently merged/valued D operator can *se* receive a definite reading. (29) and (30) therefore correspond to different lexical choices (numerations), which given the *lo* context, become either impossible (*le*) or acquire a meaning not available in other contexts (*se*).[7]

In discussing (27)-(28), we concluded that an asymmetric account of double-*l* (in terms of dative intervention under Minimality) and a symmetric account (in terms of equidistant dative and accusative) are empirically equivalent. One may wonder whether the Spurious *se* repair means that it is dative intervention that matters, after all. In reality, even the sparse exemplification of Romance varieties provided above is sufficient to show that the accusative may equally be targeted by repairs. Thus in *Gavoi* in (25), the dative keeps the same lexicalization as in isolation, while it is the accusative that reduces to a pure nominal class vowel (without *l*- definiteness base). Similarly, when double-*l* violations are avoided via simplification of the cluster, the dative may be suppressed, as in *Aliano* in (10), but also the accusative, as in *Mascioni* in (9). In other words, the overall evidence from descriptive repairs supports the symmetric status of dative and accusative clitics under mutual exclusion.

The parameter between Spanish (8) and Italian (7), where two *l*-clitics are possible within the same string, also seems well within reach of the present model. In probe/Agree terminology, one could presumably invoke multiple valuation of the D probe in Italian (31), i.e. Multiple Agree. In other words, the parameter would be between Agree (Spanish) and Multiple Agree (Italian). In a bare syntax approach of the type favoured here, essentially nothing needs to be said for Italian; simply no constraint applies to *l*-/D lexicalizations. If we maintain the generalization that each clitic string is associated with a single D operator, we can assume that Italian (31) is interpretable to the extent that the two lexicalizations of D undergo pair-quantifier formation in the sense of May (1989) (cf. also the discussion of Déprez 1999 in section 4).

(31) $[D_{[glie,\ lo]}$ $[_D\ gli\ [_N\ e]]$ $[_D\ l\ [_N\ o]]$

For reasons of space, we cannot provide analyses (or even data) for the full range of parametrization of double-*l* violations and their alternative

[7] Under conventional Merge, *lo* is merged first, so that no look ahead is implied by the merger of *se*. Proceeding top-down (for instance under Form Dependency in the sense of Manzini (1996) definite *se* may be taken to select an *l*- clitic (here *lo*). In either instance, the representational account in the text can be projected onto a derivation without implying non-local choices.

lexicalizations in Romance varieties, for which we refer the reader to the discussion by Manzini and Savoia (2002 et seq.). In the present discussion we have rejected the view that double-*l* phenomena are to be attributed to a constraint introducing a violation, which in turn leads to some form of repair. Of particular relevance is the fact that the double-*l*/D constraint is highly parametrized. In probe/Agree terminology, its presence or absence in a language can be formalized in terms of Agree vs. Multiple Agree. Equivalently, we may simply refer to languages allowing for one vs. many D lexicalizations. This less abstract formulation leads Manzini and Savoia (2005, 2007) to suggest that a form of Economy is involved. In other words, in a language like Spanish one lexicalization of *l*- Definiteness properties suffices for the entire clitic domain ï call it Economy of lexicalizations. This means on the one hand that, since more than one lexicalization is unnecessary, it becomes impossible ï yielding the local anti-identity effect. On the other hand, other clitics, specifically the free variable *se*, can be interpretively associated with the unique *l*- lexicalization, yielding the definite (so-called ósuriousô) reading, unavailable to them in other contexts.[8]

In what follows we apply this perspective, developed in connection with double-*l*, to the analysis of the other local anti-identity phenomena introduced in sections 1-2.

4. Double-*n*

In section 2.3 we reviewed double-*n* mutual exclusions, concluding that they bear remarkable surface similarity to the double-*l* phenomenon. Some languages (e.g. Italian) admit of the local co-occurrence of two *n*-words, while other languages (e.g. English) do not; other languages yet (French) admit it to a varying degree. Repairs consist in not lexicalizing one of the two *n*-words or in introducing an alternative lexicalization. An apparent asymmetry between double-*l* and double-*n*, also reviewed in section 2.3, is represented by the fact that the co-occurrence of two *n*-words in a local domain yields the impossibility of a certain interpretation (the single negation or Negative Concord interpretation) and not ungrammaticality. We already suggested that the asymmetry is only apparent. The local domain for double-*l*/D is the clitic string (the inflectional D domain), while the local domain for double-*n*/Neg is the scope of a logical negation Neg. Two *l*-

[8] Apart from *se*, any oblique can be suppletive for the dative, hence also the locative or the partitive in languages that possess these clitic forms (Manzini and Savoia 2002 et seq.).

clitics are ungrammatical in the same string in Spanish, but not in two different strings. Similarly two *n*-words are ungrammatical in English in the scope of the same negation, but not in the scope of two different negations. The only real difference is that the clitic string is a syntactically defined domain. On the contrary a double negation operator can be inserted at the LF interface subject only to pragmatic constraints, removing ungrammaticality.

In order to maximize consistency with the discussion that precedes, we will consider not the Germanic/Romance Negative Concord macro-parameter, but micro-parameterization within the Romance languages. Let us begin as usual by reviewing the lexical properties of the items involved. We assume that *n*-words in Romance do not lexicalize the logical operator negation, but are just Negative Polarity Items (NPI), hence variables read within the scope of an abstract negation and existential closure. The basic evidence in favour of this conclusion (Longobardi 1992, Acquaviva 1994 on Italian) is that *n*-words can be read in the scope of non-negative operators, in particular the question operator, as in Italian (32a-b), but also conditionals, as in (32c). The typological literature suggests that ñin questions, negation is neutralized [...]: Can you hear nothing? and Can you hear anything? have identical truth conditionsò (Haspelmath 1997: 121). However we know that non-negative *nessuno* is involved in (32a-b) because the *non* clitic required by negative readings is omitted. Furthermore the negative and non-negative reading of *n*-words is not neutralized in a conditional like (32c).

(32) a. Eô venuto nessuno?
is come anybody
óHas anybody come?ô

b. Gli ho chiesto se era arrivato nessuno
him I.have asked if was arrived anybody
óI asked him if anybody had arrivedô

c. Se arriva nessuno, dimmelo
if arrives anybody, tell.me.it
ótell me, if anybody arrivesô

Sentences like (32) are not possible in standard French. One may then want to conclude that French words are truly negative. We prefer the conclusion that *n*-words in French are NPIs. One piece of evidence in favor of this is provided by the *n*-clitic. The literature quoted takes the *n*-clitic to instantiate a negative operator even in Italian. By the same logic adopted in the discussion of (32), however, the Italian *n*-clitic must be just an NPI, since it is licenced not only by the logical negation, but also by other modal operators. Like other *n*-words it occurs in questions, as in (33a), but also in

contexts where negative and non-negative readings have clearly different truth-conditions, in particular comparatives, as in (33b), or comparative-like contexts, like (33c). These non-negative occurrences have been independently studied in the literature as instances of óspuriousô or óexpletiveô negation (Belletti 2000 on Italian). In French (34) exactly the same holds as in Italian (33). This suggests that in French as well *n*-words do not actually introduce a negative operator, but simply require to be read in its scope (being NPIs).

(33) a. Mi chiedo se non sia venuto
me I.ask if no the.is come
óI wonder if he has comeô

b. Eô più alto di quanto non pensi
he.is more tall than how.much not you.think
óHe is taller than you thinkô

c. Eô arrivato prima che non pensassimo
he.is arrived before that not we.thought
óHe arrived before we thought (he would)ô

(34) a. Jean en veut plus que Marie nôen a
Jean of.them wants more than Mary not of.them has
óJohn wants more of them than Mary hasô

b. é avant quôil ne soit trop tard
before that it not be too late
óé before it is too lateô

What interests us here directly is the mutual exclusion between *pas* and *rien* in (21b). Despite their closeness, Italian and French do not represent the best of minimal pairs, since Italian does not have a sentential negation adverb comparable to French *pas*. A much closer comparison is with Northern Italian varieties (Zanuttini 1997, Manzini and Savoia 2005, 2011a). In (35) we report data from the Piedmontese variety of *Mezzenile*, in which the sentential negation adverb can always combine with a negative argument, even if they are adjacent, as in (35a). Déprez (1999) similarly notes that doubling of *pas* by other *n*-words is possible in some varieties of French, such as Quebecois French in (36).

(35) a. u fɑi ɲint ɲɛnte *Mezzenile*
he does not nothing
óHe doesnôt do anythingô

b. u j ɔnt ɲint tʃaˈma ɲyŋ
they Loc have not called nobody
őThe havenôt called anybodyô

(36) Jôai pas vu parsonne *Québec*
I have not seen anybody
ői havenôt seen anybodyô

In other Piedmontese varieties, more restrictive patterns are observed than in *Mezzenile* ï yet less restrictive than in French. Thus in *Fontane* in (37) the combination of the sentential negation adverb with the negative argument ónobodyô is possible, as in (35a), though the combination with ónothingô, as in (37b), is not attested.

(37) a. u i vɛŋ ɲent ɲyŋə *Fontane*
it Loc comes not nobody
őThere doesnôt come anybodyô
b. e mɔɲdʒu ɲent
they eat nothing
őThey eat nothingô

Our hypothesis is that the mutual exclusion of the sentential negation adverb and the negative polarity argument in French (21b) is strictly comparable to the dative-accusative mutual exclusion that gives rise to Spurious *se* in Spanish. In probe/Agree terms, we can say that the logical negation operator cannot be valued by both *pas* and *rien*, as schematized in (38); recall that if *pas* and *rien* are just NPIs, an abstract negation operator is required at LF, theory-independently. The mutual exclusion resulting from the violation in (38) can then be modelled as a repair, perhaps consisting in ñdeleting structureò (Richards 2010).

(38) a. [¬[*pas, *rien*] [I veux [pas [rien
b. [¬ [**pas, rien*] [I veux [pas [rien

However, this is unnecessary under the present approach introduced here for double-*l*. We will say that inserting *rien* as the internal argument is sufficient to satisfy all of the properties (i.e. negative polarity properties) that would otherwise be lexicalized by the sentential negation adverb *pas*, excluding its insertion on Economy grounds. Manzini and Savoia (2005, 2011a) make this more precise, by assuming that a so-called sentential negation adverb like *pas* is an an eventive NPI, i.e. an eventive variable, restricted by the predicate VP ï while *rien* introduces a variable

corresponding to the internal argument. Since negating the internal argument also negates the event (cf. *I eat nothing* → *I don't eat*, *I eat no cabbage* → *I don't do cabbage-eating* etc.), *pas* is redundant with respect to *rien* ï hence excluded by Economy.

We expect that, along with languages of the type of French, there might be languages like *Mezzenile* in (35) that have no double-*n* constraint, exactly like there are languages which have no double-*l* constraint. In Agree terminology one could say that in *Mezzenile* the negation operator can be valued by more than one NPI (i.e. the negation probe allows for Multiple Agree). In present terms, *Mezzenile* is a language in which no Economy of lexicalizarion applies to *n*-words, so that the same logical negation can have however many of them in its scope, as in (39).

(39) [¬ [*ɲint, ɲente*] [I fɑi [ɲint [ɲɛnte

Our approach captures an important fact about mutual exclusion between *n*-words, often discussed in the Negative Concord literature, namely that it is constrained by lexical properties. Thus in a language like *Fontane* in (37) the mutual exclusion is only between the sentential negation adverb and the 'anythingô argument, while the 'anybodyô argument co-occurs with the adverb. The crucial difference between 'anythingô and 'anybodyô seems to reside in the fact that 'anybodyô is endowed with a human restriction, while 'anythingô does not have any restriction (it could refer to an individual, an event, etc.). Roughly speaking, then, Economy of lexicalizations and hence the double-*n* constraint do not apply in *Fontane* in the presence of a lexical restriction ('nobodyô).

Déprez (1999) also favors a lexical construal of the Negative Concord parameter, but bases it on a much deeper, logical divide. She argues that while in Quebecois French (or here *Mezzenile*) *n*-words are NPIs, in standard French they are numerical quantifiers. Negative Concord between two *n*-arguments, as in French (21a), depends on the creation of a pairwise numerical quantification over *n*-words; this is impossible with *pas* in (21b), which has a different logical structure, not being a numerical quantifier. However consider a variety like *Fontane*. It seems unlikely that we want to attribute different logical properties to 'nobodyô (a numerical quantifier, incompatible with negative *ɲent* 'notô) and to 'nothingô (an NPI, compatible with *ɲent* 'notô).

More evidence that parametrization does not depend on the logical properties of the lexical items involved comes from yet other Piedmontese varieties, where the sentential negation adverb is mutually exclusive with *n*-arguments in simple tenses, as in (40a), but not in compound tenses as in

(40b). The mutual exclusion in (40a) cannot depend on a different logical status of the *n*-adverb and the *n*-argument, as negative and numerical quantifiers respectively, since they happily co-occur in the Negative Concord reading in (40b). One possible construal of the contrast in (40) is based on the conclusion that compound tenses are syntactically bisentential, though some event unification (órestructuringô) operation ultimately yields a single event/situation reading (Manzini and Savoia 2005, 2011a, cf. Kayne 1993). If so, in (40b) the two *n*-words are not local enough to trigger Economy of lexicalizations ï though restructuring means that they can be read in the scope of the same logical negation (Negative Concord).[9]

(40) a. i mɔŋdʒ ŋente *S. Bartolomeo Pesio*
I eat nothing
óI donôt eat anythingô
b. i ø ŋeŋ maŋˈdʒɒ ŋente
I have not eaten nothing
óI havenôt eaten anythingô

The line of reasoning followed so far can in principle be extended beyond Romance. In particular, the view of the Romance vs. Germanic (English) parameter as involving deep, logical properties (i.e. English *n*-words are negative quantifiers) seems unnecessary. Instead we may assume that English *n*-words, like their Romance counterparts, are indefinites, i.e. NPIs, though specialized for the scope of the negation. In English, furthermore, Economy of lexicalizations is generalized, leading to the mutual exclusion of any two *n*-words. Penka and Zeijlstra (2010: 782) arrive at a similar conclusion, namely that *n*-words ñcrosslinguistically are analyzed as non-negative indefinites é The difference between NC and non NC languages can then be attributed to a parameter fixing é whether one interpretable negative feature can check multiple instances of uninterpretable features or a single oneò ï i.e. to the Agree vs. Multiple Agree parameter, as briefly described here in the discussion surrounding (38)-(39).

[9] A further problem that remains open is that in French, mutual exclusion between *pas* and other *n*-words is not removed in compound tenses.

Discussing Richards (2010) in section 1, we commented that the relevant notion of locality is not directly addressed in the present paper. In reality, if we compare the discussion of double-*l* and double-*n*, no single notion of locality seems to be involved. Implicitly, we have in fact suggested that the notion of local domain is relativized much in the sense of Rizzi (1990), coinciding with the clitic string (i.e. the D inflectional string) for clitics or with the sentence (the domain of the logical neg) for NPIs.

In short, the separation between the different traditions of semantic analysis (óNegative Concordô) and of morphological analysis (óSpurious *se*ô) has long stood in the way of a recognition that double-*l* and double-*n* phenomena could actually be unified under the same syntactic/LF account, implying neither morphological complexities (óLate Insertionô) nor deep logical parameters. The most significant feature of the unification that we propose is that no violation is involved, hence no repair ï but only varying conditions of lexicalization.

5. Negative imperatives

Next, we turn to negative imperatives, beginning with an analysis of the lexicon they involve. The examples in section 2.2 present 2nd person singular forms, which are treated by the literature (Rivero 1994, Zanuttini 1997) as ótrueô imperatives. This is not to say that these forms are morphologically specialized. For instance, in Italian, III and IV conjugation imperatives like *regg-i* óhold-2sg!ô, *dorm-i* ósleep-2sg!ô are syncretic with the 2nd singular of the present indicative, i.e. óyou holdô, óyou sleepô. In the I conjugation, imperatives like *lav-a* ówash-2sg!ô are syncretic with the 3rd singular indicative present ós/he washesô. What is true is that all of these forms are very elementary, coinciding with the verb root followed by a vowel, which in the I and IV conjugations is uncontroversially the thematic vowel. Graffi (1996) argues in fact that the same holds of the II-III class vowels (e.g. *regg-i* óholdô).

In short, morphological analysis suggests that so-called 2nd singular imperatives are uninflected for either person or tense/mood/aspect properties (cf. Manzini and Savoia 2007 on Albanian). This in turn invites the conclusion that the modal properties of a positive imperative in the 2nd singular are not provided by the verb form itself, but are contributed by the C modal position where it sits. As for the negation, there is fairly direct evidence that it may lexicalize modality, essentially as proposed by Zanuttini (1997). For instance, several languages (including Albanian, cf. Manzini and Savoia 2007) have distinct lexicalizations for what we may call the declarative negation, co-occurring with the indicative, and for the modal negation, co-occurring with the subjunctive and imperative.

Now, consider French, where the verb moves to C in positive imperatives, but remains in I in negative imperatives, so that enclisis in positive imperatives alternates with proclisis in negative imperatives, as in (17). In probe/Agree terms, the modal operator present in imperatives, namely the necessity operator in the schematic structure in (41) for (17b),

can be valued by the negation or by the imperative in C, but not by both. Doing away with Agree formalism, we can say that in (41) the modal properties contributed by the C position and by the negation fall under Economy of lexicalizations and are mutually exclusive.

(41) a. [□$_{(*ne,\ donne\text{-}C)}$ [ne [$_C$ donne [le [lui
b. [□$_{(ne,\ *\ donne\text{-}C)}$ [ne [$_C$ donne [le [lui

Suppose instead that the imperative is associated with the I position. The result is well-formed in French, as in (17c) with the structure in (42), because there is no redundancy in modal properties between the negation and the non-modal verb in I. In probe/Agree terminology, just the modal negation values the modal operator probe, or perhaps the non-modal verb in I also values it, but only partially, as in (42). This is close to what Zanuttini (1997) proposes in Minimality terms, namely that Minimality is satisfied if the negation moves instead of the imperative, to check the modal.

(42) [□$_{(ne,\ donne\text{-}I)}$ [ne [le [lui [$_I$ donne

As mentioned in section 2.3, the Minimality approach of Zanuttini cannot easily account for the existence of languages like *S. Mauro* in (16), where the negation coexists with the C position of the imperative; for, it is difficult to see what would stop Minimality from applying. Abandoning Minimality in favour of probe/Agree terminology, we can assume that in *S. Mauro* the verb in C and the negation can both value the modality operator as an instance of Multiple Agree, as schematized in (43). In bare syntax terms, in a language like *S. Mauro*, no Economy of lexicalizations applies between the modal properties of the negation and those of the verb. On the assumption that there is a single logical operator for imperative modality, the correct interpretation follows from pair-quantifier formation (May 1989), as already proposed for double-*l* (i.e. double-D) languages in section 3.

(43) [□ $_{(nu,\ tʃam)}$ [nu [$_{CI}$ tʃam [al

Consider next Italian, which resorts to suppletion by the infinitive, as in (18). Non-negated matrix infinitives in Italian also have an imperative reading, as in (44). This reading is however associated with a generic EPP argument, revealed in (44) by the 3rd person reflexive. 2nd person (singular or plural) reference is impossible. Furthermore, sentences like (44) get only a deontic reading. What Portner (2007) calls the bouletic reading (óyou should by all means fasten your seat belt if you like toô) is not possible, though it is

available with an ordinary imperative, e.g. (18a).

(44) Allacciar-si/*ti/*vi la cintura!
Fasten-oneself/yourself/yourselves the seat.belt
ôFasten your seat belt!ô

Crucially, the negative imperative formed with the infinitive, as in (18c), has an addressee interpretation of the EPP argument (binding 2nd singular anaphors) ï as well as the same nuances of necessity (deontic and bouletic) as ordinary imperatives. The suppletion problem is then formally identical to the one we faced with Spurious *se* in section 3. A lexical form independently attested in a language (*se* in section 3, the infinitive here) takes on an additional interpretation in a particular context, which is also characterized by mutual exclusion. A Minimality-based account is bound to proceed via the postulation of a repair mechanism, consisting of an added probe; this is essentially what the empty auxiliary of Zanuttini (1997) amounts to (cf. section 2.2). In present terms, on the contrary, the idea is that the 2nd person interpretation and full modal value of the infinitive in Italian (18c) is conferred simply by the context of insertion, i.e. the negation, that triggers the mutual exclusion ï but without any causal link between the two.

We begin by observing that the characterization of the imperative operator provided so far, in (41)-(43), is oversimplified. In particular, whatever operator governs the imperative interpretation is probably associated with addressee reference. For instance Zanuttini (2008) proposes a functional projection, Jussive Phrase, which ñhas an operator in its specifier that... takes as input a proposition, consisting of the predicate saturated by the subject, and yields as output a property. This property has a presupposition that its argument, corresponding to the subject, refers to the addressee(s)... this operation is what is at the basis of the observation... that the subject of imperatives is not the individual that is being talked about (the subject of predication) but rather the individual that is being talked toò. Let us then say that the imperative operator actually requires two arguments. One of them is a property, provided by the imperative predicate or, in negative environments, by the eventive variable lexicalized by the negation clitic (cf. section 4); the other argument is the addressee.

Returning to Italian (18b), the mutual exclusion between ordinary imperatives and negation can be modelled as in French, except that we now make the assumption that the imperative operator has two arguments, the first of which is an addressee and the second one is either a predicate or an eventive variable, i.e. the so-called negation. The negation and the ordinary imperative are then mutually exclusive in valuing the second argument of the

modal. The schema in (45) for (18b) is otherwise the same as for French (41).

(45) a. [□$_{(Addr)(*non,\ da\text{-}C)}$ [non [$_C$ da [glie [lo
b. [□$_{(Addr)\ (non,\ *da\text{-}C)}$ [non [$_C$ da [glie [lo

As in the Spurious *se* suppletion (section 3), it is not the impoverished content of the Italian infinitive that allows for suppletion in negative imperative contexts ï but rather its positively specified properties, specifically the fact that the infinitive is a modal form of the verb, capable of carrying deontic necessity in isolation, as in (44), with the structure in (46a). In (44), however, the infinitive is not sufficient to satisfy the second argument of the transitive imperative operator ï which explains why it cannot have an imperative reading proper, i.e. addressee-oriented, as in structure (46b). In negative contexts, as in structure (46c) for (18c), we may on the contrary assume that the second argument of the imperative operator is supplied by the negation (effectively an eventive NPI, cf. section 4). Therefore the infinitive can legitimately occur in the scope of the imperative operator, which confers on it addressee reference and the whole range of necessity readings (in particular the bouletic one).

(46) a. [□$_{(allacciare)}$ [$_C$ allacciar [si
b. [□$_{(Addr)\ (*allacciare)}$ [$_C$ allacciar [vi
c. [□$_{(Addr)\ (non,\ dare)}$ [non [$_C$ dar [glie [lo

6. Concluding remarks

In this work, we have addressed three phenomena to which local anti-identity constraints have been applied. One of them is generally thought of as morphological (double-*l*), another as syntactic (negative imperatives) and a third one as semantic (Negative Concord). Correspondingly, the OCP is generally invoked for the double-*l* constraint and Minimality for negative imperatives; as for Negative Concord, Minimality/the OCP is perceived as irrelevant, face to semantic constraints. In reality, some notion of identity is involved in all of these phenomena (including negative imperatives, whose Minimality account implies that negation and imperatives share some property). Locality is also crucial, since mutual exclusion is defined only for a given clitic string, a given proposition (i.e. a given scope of logical Neg), etc. and not for larger domains. We have argued that at least for the phenomena considered, the surface effect of mutual exclusion derives from

the fact that some languages enforce a local Economy of lexicalization (also formalizable in terms of Agree vs. Multiple Agree). Identical lexicalizations are thus avoided. The other property shared by all of these phenomena is that violations of local anti-identity (i.e. Economy of lexicalizations) do not lead to ungrammaticality. In the present conceptualization, this depends on the fact that the very same context that defines Economy of lexicalizations and thus mutual exclusion, also defines the well-formedness conditions for alternative lexicalizations. Therefore there is no causal link between violation and repair, but only a conceptual link between different lexical choices (alternative numerations).

In a nutshell, what we have achieved is on the one hand a unification of the various phenomena mentioned and on the other hand a demonstration that descriptive repairs need not global mechanisms of backtracking, look-ahead and Late Insertion. One may wonder where our proposal leaves conventional anti-identity constraints, namely the OCP and Minimality. As for the former, we may expect that if we switch from LF primitives (D, Neg, modality) to phonological primitives, an Economy formulation of the type entertained here could apply to the phonological OCP as well. The results of Nasukawa and Backley (this volume) seem to us consistent with ours (i.e. no local anti-identity constraint per se). In morphosyntax, what remains out of the present account is the analysis of phenomena generally construed as involving Minimality violations on core (i.e. A-/Aô-) movement, like *wh*-islands. Even if turns out that Minimality cannot wholly be reduced to other principles (like the present Economy of lexicalizations), the discussion that precedes shows that the divide between them cannot simply run along the PF vs. syntax/LF boundary ï since Economy of lexicalizations covers the three domains (PF, syntax, LF). Indeed the importance of the PF vs. syntax/LF divide may be overestimated in current minimalist theorizing (Berwick and Chomsky 2011; cf. Kaye, Lowenstamm, Vergnaud 1990 for a classical statement of the contrary perspective).

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