

CONSTRAINT VIOLABILITY AND THE CHAIN CONDITION

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ABSTRACT: Several hierarchical effects support the use of ranked, violable constraints in a theory of reflexives. One such effect is attributable to a “Weak Anaphora” principle, which imposes morphologically weaker forms when coreference is semantically favored, and stronger forms when it is disfavored. Another hierarchical effect pertains to the semantic/ thematic prominence of antecedents, with less prominent antecedents failing in long-distance relations. The two effects are shown to correlate, in that the same antecedents that fail in long-distance relations also require strong anaphors locally, as if they created unfavorable semantics. This correlation is deployed in deriving the effects of Rizzi’s Chain Condition, which explicitly bans reflexive clitics with syntactically derived subjects. Since the latter subjects are known to fail in long-distance relations, the correlation in question directly predicts that they will require stronger anaphors locally, thus excluding clitics.

KEYWORDS: binding; reflexive; pronoun; clitic.

1. INTRODUCTION

Attempts to account for the distribution of pronominal elements have featured two different approaches, based on inviolable and violable constraints, respectively. Chomsky’s (1981) classical Binding Theory, paraphrased here as in (1), instantiates the former approach.

- | | | | | |
|-----|----|-----------------|-------------|---------------|
| (1) | A. | an anaphor | must be | locally bound |
| | B. | a pronoun | must not be | locally bound |
| | C. | an R-expression | must not be | bound |

In (1), each principle, A, B, C, is inviolable and dedicated to the specific class of elements to which it refers. Various descendants of (1), notably the formulation of Reinhart and Reuland (1993), maintain this character.

Inviolability is also the characteristic of Rizzi’s (1986) Chain Condition in (2), aimed to account for the generalization that clitic reflexives like Italian *si* are ungrammatical with syntactically derived (i.e. moved) subjects, as shown in (3).

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(2) * NP_i ... [si_i ... e_i ...] (No reflexive clitics with derived subjects)

(3) *Gianni si sembra intelligente
Gianni to-self seems intelligent

The alternative approach, featuring violable constraints, is defended in Burzio (1989, 1991, 1994, 1996, 1998, 2010), Menuzzi (1999), Wilson (2001), Kiparsky (2002), Fischer (2004), (2005). In that approach, Burzio (1991 et seq.) has argued for replacing (1) with a principle of Referential Economy as in (4a), in conjunction with the economy scale in (4b) and appropriate locality and other restrictions on reflexives.

- (4) a. Referential Economy
b. Reflexives > Pronouns > R-expressions

The principle in (4a) is assumed to have an effect whenever C-command by an antecedent obtains the notion “bound” of (1), hence excluding R-expressions altogether in that situation so long as pronouns exist in the inventory (the effect of “Principle C”). At the same time, (4) will predict pronouns to have a distribution complementary to that of reflexives, tracking in that complementarity all the distributional complexities that reflexives are known to have cross-linguistically, including “long-distance” binding, subject orientation, inventory and other restrictions. See Burzio (1991), (1996 and refs.), Menuzzi (1999, chs. 1, 4), Fischer (2004), (2005).

This article has two related goals. The first, more general, is to re-assert the correctness of the violable constraint/ Optimality-theoretic approach in (4), especially in the light of a further important contrast that defines the space of pronominal elements beside the reflexive-pronoun contrast addressed by (4), namely the contrast between morphologically weak and strong forms illustrated in (5).

- (5) a. John lost his (*own) cool
b. Sometimes, John_i gets on his_i *(own) nerves

Contexts in which coreference is semantically odd or degenerate, like (5b), require morphologically stronger forms like *his own*, while those in which coreference is semantically

automatic or inherent, like (5a) require morphologically weaker elements like *his*, a principle proposed in Burzio (1994) and referred to as the “Weak Anaphora” Principle (henceforth “WA”). Of present significance is the fact that languages in which reflexives are morphologically stronger than pronouns feature a pronoun instead of a reflexive in local but inherently reflexive contexts like (6).

(6) Victor had the whole team with him/ *himself

By contrast, languages in which reflexives are not morphologically stronger/ more complex than the corresponding pronouns, e.g. Italian, feature only the reflexive in cases like (6), excluding the locally bound pronoun as usual. If constraints are violable, cases like (6) can be accounted for by the simple ranking WA >> REFER. ECONOMY, in conjunction with the inventory of the specific language. If they are inviolable, however, their formulation will require cumbersome exception clauses (*a pronoun must not be locally bound, except ...*), which will not only have to be duplicated in the separate principles for anaphors and pronouns (A and B of (1)), to express the complementarity of the two sets, but which will also in turn duplicate independent properties, either those of the WA principle, independently needed for (5), or properties of the of the inventory, English differing from Italian in this regard.

The second, related but more specific goal of the article, is to argue that once the violable constraint approach is taken, then the Chain Condition of (2) can be effectively dispensed with, its effects reducing to those of WA. The reason is that it can be independently shown, through the study of long-distance anaphora, that syntactically derived subjects constitute semantically weak antecedents, thus allowing us to see the antecedency relations they enter into as semantically deviant, hence requiring, under the WA principle, morphologically stronger forms of the reflexive, like Italian non clitic *sé* or *se-stesso*, correctly excluding the clitic option in (2) directly.

The article is organized as follows. Section 2. shows how RE (4) interacts by rank with a certain agreement hierarchy that holds cross-linguistically for a specific class of reflexives. Section 3. introduces the WA principle and the relevant hierarchy of morphological strength, yielding further interaction by rank. Section 4 addresses the locality conditions on reflexives in terms of competition among antecedents and establishes the correlation between antecedents that fail in long-distance relations and those that require morphologically strong anaphors locally under the WA principle. It then notes how the effects

of the Chain Condition derive from WA given that correlation. Section 5 concludes.

2. OPTIMAL AGREEMENT

The violable character of the Referential Economy (RE) principle in (4) is established not only by the fact that it is itself hierarchical, but also by the fact that it interacts by rank with other hierarchies. One of these is the agreement hierarchy in (7).

(7) Agreement hierarchy for SE reflexives

Impersonal > 3rd > 1st, 2nd

Reflexives that, in the terminology of Reinhart and Reuland (1993) are of the “SE” type, like Italian non-clitic *se*, clitic *si* and their counterparts all across Romance, Germanic and Slavic, obey the hierarchy in (7) in the sense that, if they allow a 3rd person antecedent, they will also allow an impersonal one, and if they allow 1st and 2nd person antecedents they will also allow 3rd person and impersonal ones. In general, SE reflexives in Slavic allow all points on the scale in (7), while in Germanic and Romance they only allow impersonal and 3rd person antecedents. One case that permits only impersonal antecedents is that of French non-clitic *soi*, cognate to Italian *se*, both illustrated below. With antecedents that the SE reflexive excludes, one invariably finds the corresponding pronoun, as shown in (8) and (9).

(8) Italian

a. Gianni_i parla sempre di sé_i/ *lui_i
Gianni speaks always of self/ him

b. Io_i parlo sempre di *sé_i/ me_i
I speak always of self/ me

(9) French

a. On_i n'aime que soi_i/ *lui_i
One not-love but self/ him
“One only loves oneself”

b. Jean_i n'aime que *soi_i/ lui_i
Jean not-love but self/ him
“Jean only loves himself”

Just as the ungrammatical variant of French (9b) is grammatical in Italian as (8a) shows, the ungrammatical variant of Italian (8b) would be grammatical in Russian, due to the different language-specific choices allowed by (7). However, the contrast between ungrammatical *soi* in (9b) and a grammatical clitic counterpart as in *Jean se voit* “Jean sees himself” shows that the effects of (7) can vary even within an individual language. With regard to the peculiarity of French *soi*, one may note that related Romance varieties (e.g. Northern Italian dialects) have lost such element altogether, the non-clitic variant of the SE reflexive. Extrapolating from this, one can perhaps attribute to French *soi* a somewhat “costly” or marginal status, which would make it ill-suited to the any of the more costly choices in (7), thus restricting it to impersonal antecedents for this reason.

If RE (4) is violable as proposed, then one can account for the observed generalizations by translating (7) into the constraint hierarchy *1, 2 >> *3 >> *IMP. applicable to antecedents of SE reflexives and then simply interpolate RE into that hierarchy appropriately, as illustrated for Italian in (10).

(10) a.	/Gianni _i parla di x _i /	*1, 2	RE	*3	*IMP
	☞ sé			*	
	lui		*		

b.	/Io _i parlo di x _i /	*1, 2	RE	*3	*IMP
	sé	*			
	☞ me		*		

The case of Slavic will follow from ranking RE above *1, 2, while the case of French *soi* will follow from ranking RE just above *IMP.

There are no comparable prospects for the inviolable constraint approach in (1). First, one would have to incorporate the same restriction in both principles A and B. For instance, for the Italian cases in (10) one would have to state A as “A SE anaphor must be locally *Impersonal or 3rd person bound*” and B as “A pronoun must *not* be locally *Impersonal or 3rd person bound*”. Then case (10b) will follow, since the pronoun, while *locally* bound, is not bound by an impersonal or a 3rd person antecedent. While the general redundancy between principles A and B of (1) is a fundamental argument against that approach, in this case the argument is made stronger and effectively insurmountable. The reason is that the behavior

characterized by (7) is not a property of reflexives in general, but only of the so-called SE reflexives, namely those reflexives that exhibit no morphological agreement with the antecedent. If we take overt morphological contrast seriously, then those reflexives must have no formal morphological features (Burzio 1991), and in particular no (or “zero”) person specifications. Then, the scale in (7) can be taken to express greater and greater degrees of approximation to agreement, impersonals being best because (true to their name) they are also “zero” person, just like the SE reflexive (Burzio 1992). Approximated agreement does not affect English reflexives because the latter are overtly inflected (*myself*, *yourself*, ...) and hence just agree with their antecedents directly, not by approximation. This is why their distribution is not person-restricted. At the same time, however, there is no particular difference between English pronouns and the pronouns of the other languages under consideration. Hence, cross-linguistic differences appear to depend on the morphology of reflexives, not that of pronouns. Yet a principle B for pronouns would have to change depending on what the morphology of the corresponding reflexives is. The only reasonable conclusion from this absurdity is that there cannot be any such principle, and that the pronouns must rather be a default outcome, as in the optimizations in (10), and therefore that there is only a principle that requires reflexives, violably (RE).

Even if one accepted the embarrassing duplication that a principle B would require, there would still be no way, within inviolable constraints, to express the factual hierarchy in (7). One can well state, for Italian *sé* “Impersonal or 3rd person bound” and for French *soi* “Impersonal bound”, but there would be no reason in a stipulative approach why there could not be an “anti-*soi*” case, which is 3rd person-bound only, or an “anti-Russian” case which is “1st or 2nd person bound” only, excluding 3rd person and impersonal antecedents. These cases do not exist, the only attested combinations of antecedents being the ones defined by (7), namely {Impers.}; {Impers., 3}; {Impers., 3, 1, 2}. As just indicated, the hierarchy in (7) is plausibly a hierarchy of approximated agreement, such that -naturally- closer matches are better than more remote matches. But notions like “closer than”, “better than” are absent from the expressive power of inviolable constraints, which can only distinguish between good and bad (Burzio 1998). Further, the notion of approximated agreement that would characterize (7) is in fact independently required by Italian data like (11).

(11) Si pensa che vincerá
One thinks that will-win

a. *One_i thinks that one_i will win

b. One thinks that he/ she will win

Italian verbs do not have inflectional endings dedicated to impersonals. While in (11) the main subject is impersonal *si*, the main verb is in the 3rd person (singular) Bthe closest possible approximation under the proposed account of (7), which has *Impersonal* and 3rd next to one-another. In contrast to this, the embedded verb in (11), which has a null subject, is also in the 3rd singular like the main one, and yet that null subject cannot refer back to the impersonal subject as in (11a), but only to some 3rd person entity as in (11b). Therefore, alone, a sentence like (11) suffices to establish violability of constraints. The reason is that the ungrammaticality of (11a) shows that “impersonal” and 3rd person are crucially different Ba mismatch. But then the otherwise grammatical status of the sentence (the (11b) reading) shows that the exact match, required of the embedded inflection, can be violated by the main inflection, hence violability. Of course one must assume that null subjects, which are effectively pronominals, work differently than simple agreeing inflections. But there is no paradox in this. Pronouns obviously establish their reference based on their morphological features, the null subject in (11) thus referring to a 3rd person entity. Agreeing inflections do not do so. They just agree. Evidently, reference is relatively “exact” Bit does not approximate the way purely formal agreement does. End of story. In sum, (11) shows that, in an agreement system, when an exact match to an impersonal is not available, 3rd singular is next in line. Hence it establishes, independent of the theory of reflexives, the agreement basis for the hierarchy in (7) to the extent that, unlike 3rd, 1st or 2nd person options are not next in line for impersonals (witness * *Si pensavo/ pensavamo...* “One thought-1st SG/ 1st PL...”).

Re-stating the conclusion, a theory of reflexives based on inviolable constraints would fail to capture the implicational universals expressed by (7) if antecedent restrictions were simply built by stipulation into principles A and B. Instead, the correct move from that perspective would be to defer choices to appropriate agreement principles as independently needed for (11), stating simply in A that a reflexive must be locally “bound by an agreeing antecedent”, leaving it to those agreement principles to decide what that is. Now a principle A could remain inviolable, but the theory of agreement itself would need violable constraints as just argued, leading to the same general conclusion in favor of violability. Also, a principle B (which an inviolable principle A presupposes) would now -and ever more hopelessly- have to state that a pronoun must not be locally bound by an antecedent agreeing with the corresponding reflexive”.

An alternative escape route for the “inviolable” approach in (1) comes to mind but is also foreclosed. It would consist of claiming that the locally bound “pronouns” of (8) and (9) are in fact reflexives, i.e. that these forms are inherently ambiguous (as in fact claimed in most traditional grammars). This would be a type of morphological syncretism, namely a case where a potential morphological distinction is obliterated, the same form coming to serve two distinct functions, like the Genitive/ Accusative syncretism of English: “I bought *her* (GEN) book/ I saw *her* (ACC)”. In this case, the syncretism would merge reflexive and pronominal forms, extending the use of the latter. Once again we are faced with the hierarchical effect in (7). From this point of view it would now have to be the case that, rather than from agreement, (7) stems from the workings of syncretism. Namely, it would have to be the case that the syncretism in question affects 1st and 2nd persons first as in Romance at large, and only then 3rd person yielding at that point locally bound French *lui* of (9b). Russian would seem to have no such syncretism, maintaining the reflexive-pronoun distinction in all persons.

At first sight, this may not seem implausible, as there is independent evidence that 1st and 2nd person forms tend to be more syncretic than 3rd person ones. For instance, the Italian 3rd person Case-distinction *lo/ gli* “him-ACC/ him-DAT” does not exist in the 1st or 2nd persons, that only have Case-ambiguous forms like *mi, ti* “me-ACC/ -DAT, you-ACC/ -DAT”, etc. Note, however that, if this were correct, it would still require some notion “greater than” in the system to express the generally greater syncretic pressure in the 1st and 2nd persons than in the third such that only if such pressure succeeds in the 1st and 2nd, will it ever succeed in the 3rd. In other words, the point is that the hierarchical effect in (7) is simply factual, so that any theory aiming to capture it would have to feature some hierarchical provision somewhere. If there is a hierarchy there is rank, and if there is rank, there must be violability, QED. In this regard, consider also the Russian cases in (12).

- (12) a. On_i u□e rasskazal mne o [svoej_i / *ego_i □izni]
 he already tell me about self's/ his life
 “He_i has already told me about his_i life”
- b. Ty u□e rasskazal mne o [svojei/ ?tvoej □izni]
 you already tell me about self's/ your life
 “You have already told me about your life”

As argued in Burzio (1996) and below, the binding of possessives is a mild form of long-distance binding. Such non locality will generally levy a penalty on the reflexive. However, because mild, such penalty is evidently not sufficient to favor the pronoun in the 3rd person case in (12a). Yet, when it combines with the independent penalty incurred from agreement by approximation in the 1st or 2nd person as in (12b), the cumulative penalty appears to be stronger and evidently comparable to the violation of RE (4) incurred by the pronoun. In other words, the contrast in (12) shows that the effects of (7) are manifest even in Russian.

Now consider the syncretism hypothesis. While one might have suggested that Russian has no reflexive-pronoun syncretism at all, (12) now shows that this would not be quite correct. Rather, to account for (12), one would need to assume that, even in Russian, there is greater syncretic pressure in the 1st and 2nd persons than in the 3rd such that, when other factors combine with such pressure like the presumed mild non-locality of possessive anaphora, the pronoun option becomes available. In other words, Russian confirms what is already clear from cross-linguistic distribution, that if it is syncretism that we are dealing with, then syncretic pressure is graded Bgreater in the 1st and 2nd persons. Given this graded effect, rank and hence violability are thus -again- here to stay, the only question being whether the graded/hierarchical effect in (7) is grounded in approximated agreement (worst in 1st and 2nd) or in syncretic pressure (maximal in 1st and 2nd). There is no way to answer this question without first putting some flesh on the theory of syncretism's bones. When that is done, however, the syncretism hypothesis founders.

So, Burzio (2005, 2007)), Burzio and Tantalou (2007) argue that syncretism is a type of neutralization due to similarity of the candidate forms, a phenomenon that is thus parallel to neutralization of phonological contrast in the perspective of Steriade (1994, 1999). On this view, 1st or 2nd person forms, for example a 1st person Dative and a 1st person Accusative, can be seen as being more similar to one-another than 3rd person forms are, by being more contentful, let us say for present purposes, by containing the specification [+participant]. Hence, they would be more similar to one-another by having more specifications in common than 3rd person forms, assuming here “[+participant]” is privative, lacking a “[−participant]” counterpart. While this is now in the context of the syncretism hypothesis, we may note that the present claim would be consistent with the above agreement-based account of (7), which indeed placed 1st and 2nd further away from zero specifications, namely impersonal forms, than 3rd person forms.

The point is now that, while this similarity-based characterization of syncretism captures significant cross linguistic tendencies as argued in the references, it seems completely inapplicable to the case at hand, for the following reasons. In the languages under consideration, one never finds, where the alleged reflexive-pronoun syncretism does not occur (let's say, Russian), any forms of the reflexive specifically dedicated to 1st or 2nd person. Instead, one only finds in those persons the exact same form of the reflexive as in the 3rd person (and with impersonals). Insisting on similarity with the 1st and 2nd person pronouns would entail assigning 1st and 2nd person specifications to the reflexives anyway, despite the lack overt morphological contrast with the forms used in the 3rd person. This move would be totally ad-hoc. Moreover, it would also be futile, given the behavior of English-type reflexives. Since the latter are unquestionably endowed with person specifications (*myself*, *yourself*, ...) just like their pronominal counterparts (*me*, *you*, ...) they are in that regard similar to the pronouns, and yet they never syncretize in the would-be expected way, to yield for instance *John saw himself* vs. **I saw me* parallel to (8a, b) above. In fact, on the similarity-based approach to syncretism, the syncretism account of the hierarchical effect in (7) would make predictions that are *doubly* counterfactual. On the one hand, English reflexives should be more prone to such syncretism, as they share overt person specifications with their pronoun counterparts as just noted. On the other hand, SE-reflexives should, if anything, syncretize with their pronouns in the 3rd person first, not 1st and 2nd as they in fact do. The reason is that we know both from their overtly uninflected character and from their double role as impersonals that SE-reflexives are zero-person (Burzio 1992), and we know from (11) above that zero-person is closest (most similar) to 3rd. Hence, at least within a similarity-based approach to syncretism, a syncretism account of the basic facts in (8) and (9) is not at all forthcoming. Whether alternative approaches to syncretism (e.g. that of the “Distributed Morphology” framework) could leave any hope for the syncretism hypothesis is unclear but does not seem likely, allowing us to conclude with some confidence that approximated agreement, not syncretism, is behind the discriminating behavior in (7) above. Hence, English-type reflexives do not discriminate this way because, by being overtly inflected, they agree with their antecedents directly rather than by approximation. Besides, we have seen that agreement by approximation is needed in any event given the behavior in (11). The latter cannot be reduced to syncretism, in this case of impersonal and 3rd person inflectional endings, because, if such syncretism was the case, then the embedded inflection should be able to refer to an impersonal, contrary to (11a).

obeying some independent “Principle B”, then the principle requiring reflexives, here Referential Economy (4) must be violable. This section has added weight to that conclusion by noting that the latter principle needs to be interpolated by rank into a constraint hierarchy that is independently needed, namely whatever constraint hierarchy defines the scalar effect in (7). I have argued that the latter constraint hierarchy is one that penalizes approximated agreement, applying to those reflexives which, by being morphologically uninflected, can only agree by approximation. As such restrictions depend solely on morphological properties of reflexives, it would seem theoretically perverse to repeat those restriction in a principle B for pronouns since, while there is a link from morphology to distributional restrictions, the morphology of pronouns has nothing to do with it. I return below to an attempt by Kiparsky (2002) to adopt a Referential Economy approach along the lines of (4), while at the same time also maintaining a vestigial Principle B for pronouns.

3. WEAK ANAPHORA

3.1 PRESUPPOSED COREFERENCE VERSUS MORPHOLOGICAL COMPLEXITY

Pronominal elements differ from one-another not only by their degree of referentiality, which distinguishes reflexive from non-reflexive pronouns, but also by what we may call morpho-semantic strength. Elements that are weak on this scale are selected only when conditions for their referential role are favorable, while unfavorable conditions require stronger elements, as was shown in (5). The Italian examples in (13) and (14) further illustrate this effect.

- (13) a. Vittorio ha tutta la squadra con sé (*stesso)
 Vittorio has all the team with self same
 “Vittorio has the whole team with him”
- b. Vittorio chiacchiera con sé ??(stesso)
 Vittorio chatters with self same
 “Vittorio chatters with himself”
- (14) a. Gianni (*si) apre gli occhi

Gianni to-self opens the eyes
'Gianni opens his eyes'

- b. Gianni *(si) taglia i capelli
Gianni to self cuts the hair
'Gianni_i cuts his_i hair'

In (13), the expression *X has Y with Z* is inherently reflexive in the sense that it implies identity of *X* and *Z*, as an object of possession *Y*, here “with *Z*”, is likely and stereotypically with its possessor *X*. Under these conditions, the morphologically weaker element *sé* is felicitous, while the stronger form *se-stesso* is not. Conversely, in (13b), the expression *X chatters with Y* strongly implies *X Y*, in the sense that one can only talk with oneself as a somewhat peculiar type of activity, deviant from the ordinary or default meaning of the verb. Under these conditions, the stronger form *se-stesso* is strongly preferred over weaker *sé*. Turning to (14a), *opening one's eyes* is ordinarily an action “from within” and hence an inherently reflexive one since, at least from within, one cannot open someone else's eyes. One can manually pick up someone's eyelids, but then -again- this meaning is peculiar, not parallel to the ordinary or default meaning of the expression. On the ordinary meaning, a dative benefactive or possessor argument may not be expressed overtly by clitic reflexive *si*. Instead, a “weaker” zero option must be chosen for such an argument. The opposite choice holds in (14b), where *cutting one's hair* is not an action from within and hence not an inherently reflexive one in the above sense. We can thus say that inherent reflexivity exists when the reflexive reading is both the default reading and semantically distinctive, palpably different from the non reflexive one, as in (14a) and -let us say- (13a). When the reflexive reading is distinctive, but *not* the default one, we can talk about inherent *irreflexivity*. This would be the case with *chatter* in (13b), while the case of *cut X's hair* in (14b) is to be viewed as either also irreflexive, or perhaps just neutral (non-distinctive reflexive/ irreflexive meaning). What one finds in these examples and others is thus that morphological strength or complexity correlates with the granularity of the semantic modification needed to overcome the inherent semantic biases of the predicate or the expression. This finding motivates the principle in (15a) from Burzio (1994), utilizing the morphological scale in (15b).

- (15) a. **Weak Anaphora Principle (WA):** Inherent coreference] Weak morphology
 b. **Scale of Morphological strength:**

- | | | | |
|------|-----------|-------------|---------------------|
| 1. Ø | 2. Clitic | 3. Argument | 4. Argument-adjunct |
| | (si) | (sé) | (se-stesso) |

Although the scale in (15b) uses reflexives for exemplification, the system in (15) is intended to cross-cut the distinction between reflexives and pronouns, hence shedding light on the contrasts in (16), (17) as well.

- (16) A proposito di Gianni,
- | | | |
|----|-------------|----------------|
| a. | l'ho | visto ieri |
| | him-I-have | seen yesterday |
| b. | *ho | visto lui ieri |
| | I-have seen | him yesterday |

“Speaking of Gianni, I saw him yesterday”

- (17) Chi hai visto?
- | | | |
|----|-------------|-----------|
| a. | Ho | visto lui |
| | I-have seen | him |
| b. | *L'ho | visto |
| | him-I-have | seen |

“Who did you see? I saw him”

In (16) the pronoun refers to a topic of discourse, a situation arguably akin to inherent reflexivity in that topics are prominent by definition and hence “easily” or naturally referred to. The exclusion of the non-clitic option in (16b) can thus be again attributed to WA. We are also seeing, however, that different cases may utilize different portions of the scale in (15b), a point to which I return. In contrast to the presupposition inherent in topics, *wh*-questions point to what is *not* known, so that corresponding answers will necessarily provide information that is new rather than presupposable, making the choice of the stronger pronominal option in (17) understandable under WA as akin to inherent *ir*reflexivity.

The WA principle in (15) can be interpreted as forcing morphological economy, allowing expenditures of morphological resources only when unfavorable semantic conditions demand. As such, it is directly relatable to Cardinaletti and Starke’s (1999) “Economy of

Representations” principle for pronominal elements. Cardinaletti and Starke’s discussion differs from the present one in that, on the one hand, they only consider non-reflexive pronouns. On the other, however, they identify several contexts additional to the ones being considered here like (15) and (16), that appear to discriminate between the more and the less economical forms (in particular, they consider: modification, coordination, and human versus non-human referents). I will put these additional effects aside, assuming that they may ultimately be subsumed under the WA perspective (modulo some additional assumptions. See Burzio 2010).

A further notable aspect of Cardinaletti and Starke’s work is the identification of a class of Italian pronouns that are semantically weak in the sense of (15) but are not obviously weak morphologically, thus breaking the otherwise general semantics-morphology alignment. For instance, the literary/formal non-clitic subject *egli* “he” behaves like clitic *lo* (*l’*) of (17b), e.g. as in *Chi è venuto? *Egli/ Lui è venuto* “Who came? *He-formal/ He came”. I will put this issue aside as well, except to conclude that the grammatically relevant notion of semantic weakness, though substantially grounded in morphology, must be a bit more abstract, perhaps to include elements that may be peripheral in the language’s inventory (but see also Cardinaletti and Starke’s account).

Now, like the RE principle in (4), the WA principle in (15) must clearly be understood to be violable. Arguments to this effect will in fact substantially rehash the RE-based arguments given above. Specifically, patterns of apparent exceptions to WA reduce to independent facts about inventories and syntactic characteristics of individual languages. For instance, the ungrammatical Italian case in (16b) is grammatical in English (cf. gloss). The obvious reason for this is that English does not have clitics in its inventory or as a syntactic option, making the non-clitic option optimal. A similar effect is observable in the Italian case in (18).

- (18) A proposito di Gianni, sono andato da lui ieri
 “Speaking of Gianni, I went to (see) him yesterday”

The difference between (16b) above and (18) is that, in the latter case, cliticization is excluded, as the *da* complement in (18) is not among those that permit cliticization. The same holds for the *con* “with” complement in (13) above, thus accounting for the grammaticality of non-clitic *sé* in (13a) in contrast to the context of (19), which permits cliticization, and correspondingly excludes *sé*.

- (19) Gianni si guarda attorno/ *?guarda attorno a sé
 Gianni to-self looks around/ looks around to self
 “Gianni_i looks around him_i”

The case in (19) is arguably one of inherent reflexivity, on the assumption that, when it comes to *looking around X*, the meaning in which *X* equals *onself* is distinctive, compared with looking around *something/ someone else*, as well as default. Given these facts, any inviolable principle to the effect that some semantic context S_i requires some specific form F_j from the set in (15b) will have to feature exception clauses which will be inevitably redundant with independent facts about inventories or syntactic conditions of the relevant language. By contrast, violability by rank will have no such redundancies or duplications. Note further that it is in fact not just a matter of stating appropriate exceptions (e.g. “...unless cliticization is not available”, as for the English version of (16)). It is rather a matter of ensuring that the WA principle (15) will be able to make its choice over whatever sector of the scale in (15b) is not pre-empted by overriding factors, as we can see for instance in (20) compared with the Italian counterparts in (14).

- (20) a. John opened his (*own) eyes
 b. John cut his (own) hair

The pattern in (20) is parallel to the one in (14), with the stronger option excluded in inherently reflexive (a) and allowed in (b), though different points on the scale in (15b) are involved (3-4 in (20), versus 1-2 in (14)). The present discussion will substantially reduce such variation to independent factors, though perhaps not in full. So, we have seen that the clitic option with the preposition *con* “with” in (13a) is excluded for independent reasons, but not exactly why the zero option, available in (14a), is also excluded in (13a). Note that other prepositions, like *assieme* “together” or *addosso* “on” allow such option, e.g. *Gianni aveva tutta la squadra assieme* “Gianni had the whole team together (i.e. with him), or *Gianni aveva la maglia addosso* “Gianni had his sweater on”, a behavior replicated by English *on*. Now, in the English cases in (20), the clitic option is excluded for obvious reasons, but the reasons excluding the null option are not so obvious, given that other cases of inherent reflexivity allow it, as in *John was hit on the head*, where the “head” is necessarily John’s and the possessor remains unexpressed. These uncertainties aside, the conclusion holds that when a segment of the hierarchy in (15b) is not available, for reasons that are often if not always

transparent, the WA principle still applies with respect to the rest of the hierarchy. As with the agreement hierarchy of (7) above, there is therefore no refuge for an approach based on inviolable constraints in simply stating constraints with exception clauses (which would in any event be duplicative). Rather, hierarchical effects establish the presence of rank, and hence exclude inviolability.

WA effects thus appear to duplicate the argument for violability based on the effects of RE (4). But in addition to providing this new argument, they also reinforce the earlier argument. The reason is that, just like potential violations of Agreement (7), potential violations of WA (15) can induce violations of RE, namely choice of a pronoun where a reflexive would have been expected. This happens, for example, in the cases in (21) and (22).

- (21) English:
- a. Victor had the whole team with him
 - b. Victor looked around him
- (22) Frisian (Everaert 1991):
- a. Hy_i skammet *himsels_i/ him_i
he_i shames himself_i / him_i
‘‘He is ashamed’’
 - b. Hy_i rette himsels_i/ him_i ta foar syn opkommen
he_i prepared himself_i him_i for his
performance

We have noted earlier that the expressions in (21a, b) both constitute types of inherent reflexivity. The case in (22a) does too, as it describes a psychological state or action not comparable to the action of shaming others. As for the case in (22b), we may regard it as involving a weaker type of inherent reflexivity, as -plausibly- the semantics of preparing oneself is different, though not unrelated, to that of preparing others. On the other hand, predicates that have no degree of inherent reflexivity at all (e.g. *judge*, normally used irreflexively) allow only reflexives and not coreferential pronouns in Frisian. Such interaction between WA and RE obtains in those languages in which the inventories of reflexives and pronouns are asymmetrical, in that reflexives are stronger than pronouns on the scale in (15b) in virtue of their greater morphological complexity. Languages that have no such asymmetry exhibit only reflexives in such cases, as in the Italian cases in (13a) and (19) above and the Dutch and German cases in (23) below. In all of these cases pronouns would be ungrammatical.

- (23) a. Dutch: Het gerucht verspreiddle zich
 the rumor spread self
- b. German: Er schämt sich
 he shames self

Note that the introduction of the WA principle in (15) now allows us to analyze predicates like the one in (23a) that have transitive counterparts (*X spread the rumor*) as inherently reflexive like the predicate in (23b) rather than as pure unaccusatives (contra Burzio 1986). On this analysis, the “rumor” of (23a) is an inherent/ internal agent or cause that spreads itself, the rumor. Such internal agency/causation can be seen as comparable to that of inducing shame on oneself of (23b), both cases being semantically incomparable to their external agency/ causation counterparts (spreading a rumor; shaming others), hence meeting the “distinctiveness” criterion for inherent reflexivity.

In contrast to the Italian cases (13a), (19) above, which allow only reflexives where English features a pronoun, the French case in (24) (ZribiHertz 1980) looks like a replica of its English counterpart in (21a).

- (24) French: Victor a toute l'équipe avec lui (*même)
 Victor has all the team with him same

This identity is accidental, however. In the French case, the violation of RE is induced by Agreement, as reflexive *soi* accepts only impersonal antecedents as was shown in (9), while in the English case the same violation is argued to be induced by WA (15).

We note that the semantically strong character of English (/Frisian) style reflexives which was key to the above account is established independently by contexts like (24) and (25) where English reflexives are allowed, but weaker reflexives (cf. Italian) are excluded.

- (24) Italian: Gianni non *si è piú / non è piú sé ??(stesso)
 Gianni not self is anymore/ not is anymore self same
 “Gianni is no longer himself”

- (25) Italian: a. Ringo cadde su se-stesso_S
 “Ringo fell on himself (“ his statue)”
- b. ?? Ringo cadde su di sé_S
 “Ringo fell on himself (?? “ his statue)”
- c. * Ringo si_S è sputato addosso
 Ringo to-self has spat upon

“Ringo spat on himself (* “ his statue)”

The reflexive of (24) expresses an imperfect or degenerate type of coreference because it refers not to the subject Gianni, but rather to what Gianni used to be. Such degenerate coreference may plausibly be seen as similar to that of cases of inherent irreflexivity like (13b). Here, clitic *si* may well be excluded for independent reasons (see discussion of the Chain Condition below), but non-clitic *sé* is still sharply deviant compared with stronger *se-stesso*, as we may expect from the WA principle. Coreference is similarly imperfect in (25) where, as suggested by subscript *S*, the reflexive refers not to Ringo, but rather to a statue or image of Ringo, as in a hypothetical situation in which Ringo (Starr, of *The Beatles*) confronts a statue of himself (Jackendoff 1992). Such readings, tolerable with English reflexives (cf. glosses), are sharply excluded in Italian with anything other than the strong form *se-stesso*. Hence, English-style reflexives prove to be semantically strong, in line with their morphological structure, so that the same WA principle that favors them in (24), (25) will exclude them in (21), (22), resulting in locally bound pronouns.

This leaves us with a small residue of idiosyncrasy in the difference between English and Frisian. While Frisian generally replicates the English facts in cases like (21), English differs from Frisian in cases like (22), by not utilizing a pronoun with simple inherently reflexive predicates. Putting aside rare cases like *behave (onself)*, where the (strong) reflexive can be used in apparent violation of WA, English generally oscillates between two alternative strategies in such cases. One is to directly reduce the valency of the predicate, e.g. *The rumor spread*. The other is to resort to some kind of paraphrasis, often involving an adjectival passive with *be*, e.g. *be ashamed* (or *get*, e.g. *get bored*). These strategies can both be viewed as instantiating the zero option of (15b), in so far as one argument entering the reflexive relation is suppressed, while being both fundamentally lexical, witness the variation among predicates. We can then tentatively deal with the English/Frisian variation by attributing some appropriate cost to the valence-suppressing lexical operations in question (resulting in a type of allomorphy), so that, in general, English would choose to pay such cost, while Frisian would incur a violation of RE (4) instead (via language-specific ranking), both languages doing so to satisfying WA. Note that the English case in (21b) involving preposition *around* in fact allows both pronominal and zero options: *John looked around (him)*, in contrast to the case in (21a) involving preposition *with*, which (unlike its Italian counterpart *assieme*) is never intransitive, a variation that I put aside.

In sum, beside providing renewed arguments for violability of constraints in general

based on the hierarchy in (15b), WA effects also provide new arguments for the specific violability of the principle that bans pronouns, since, in languages in which pronouns are morphologically weaker than reflexives, satisfaction of WA can lead to locally bound pronouns.

3.2 WEAK ANAPHORA VERSUS “OBVIATION”

Before closing this section, I briefly consider an alternative to WA proposed in Kiparsky (2002). It consists of an “obviation” principle stated as in (26)

(26) OBVIATION: An obviative and its coarguments have disjoint reference. (Kiparsky 2002)

In Kiparsky’s theory, pronouns are generally “obviative” while reflexives are generally “proximate” (= not obviative). In this regard, (26) is thus closely reminiscent of Principle B of Chomsky’s (1981) Binding Theory. It is clear, however, that pronouns are not just excluded when their antecedent would be a coargument of the same predicate as (26) prescribes, but, more generally, whenever a reflexive would be available instead, as prescribed by RE (4) above. In fact, Kiparsky does not propose (26) as an alternative to RE, but rather in addition to it, which means that when the antecedent is a coargument, a pronoun will be generally excluded by both (RE) and (26). This massive redundancy calls for some scrutiny of Kiparsky’s motivation for (26). In essence, the latter consists of the putative existence of a special class of elements, which, while being reflexive, are actually “obviative” at the same time, such as Swedish *sig* in (27).

(27) Swedish: Han angrep *sig/ sig själv
“He attacked himself”

As Kiparsky notes, the choice of *sig* in (27) satisfies RE. Hence, some additional principle must be at work to exclude it. Kiparsky’s conclusion is correct thus far, but not on further identifying the additional principle with OBVIATION (26). In this connection, consider that Kiparsky also notes that predicates that can be taken as inherently reflexive freely allow *sig*, as in (28) (while stronger degrees of inherent reflexivity actually demand *sig*, at least in closely related Germanic languages. See Everaert 1986; Hellan 1988; and above examples).

- (28) Han försvarade sig/sig själv
“He defended himself”

In light of cases like (28), Kiparsky proposes that inherent reflexivity is definitionally “[obviative]”, and thus able to override the [+obviative] specification of *sig*, changing it to “minus”. But it is clear in the present perspective that the contrast between (27) and (28) is just the one predicted by WA (15), which favors weaker forms with inherent reflexivity and stronger forms elsewhere, though languages may differ a bit in the way they line up the morphological scale in (15b) with the semantics (See Everaert 1986, sect. 7.6 for some differences among Germanic languages). Now, compared with the WA account, Kiparsky’s suffers from the following liabilities. First, it seems internally circular. One could have just as easily, while still maintaining OBVIATION (26), have assigned “*minus* obviative” rather than *plus* to *sig*, and then attributed to the *non*-inherently reflexive contexts like (27), rather than to inherently reflexive (28), the ability to flip the value, now from *minus* to *plus*. Cases like (27) would still have fallen under (26) while cases like (28) would have been exempted, as before. This alternative would in fact fare better than Kiparsky’s original, given Kiparsky’s own observation that in general, elements that tilt against coreference, which he describes as [+obviative], are in fact morphologically stronger than their alternatives. This is true of the so called “obviative” pronouns of Ojibwa (Algonquian) that he discusses, whose behavior appears similar to that of Italian *lui* in (16), (17) above, also morphologically strong, compared with its clitic counterpart. Since *sig* of (27), (28) is morphologically weaker than its alternative *sig själv*, the value [-obviative] would seem better suited to it on these grounds.

More importantly, however, Kiparsky’s own analysis contains elements of the WA principle, which makes (26) superfluous. Consider that the latter analysis postulates the conditional *inherent reflexivity* Ψ [-obviative] by definition of inherent reflexivity, as noted above. In interaction with the postulated reversal of underlying [+obviative] for *sig* and (26), such conditional results in the further conditional *sig* Ψ *inherent reflexivity* (if the form *sig* is used, then the context must be inherently reflexive). But there seems little point in taking such a circuitous route as Kiparsky’s, since one could -equivalently- just have stated the latter conditional directly, dispensing with both (26) and the feature [obviative]. Combine that with the observation that *sig* is just a member of a class of relatively weak anaphors cross linguistically, and the latter conditional becomes one half of the WA principle in (15). The other half, turning it into a bi-conditional, is required by the fact (not considered by Kiparsky)

that some cases not only allow weaker elements, but require them (e.g. (13a), (16), (20a), (21), (22a)). In sum, given that Kiparsky's analysis requires some form of the WA principle after all, the rest of it seems superfluous, only adding to the complexity.

Consider as well the specific reference to coarguments in (26). It is designed to account for the contrast between (27) and (29) below.

(29) Swedish: John anser sig ha blivit bedragen.
 John considers self have become cheated
 "John considers himself to have been cheated."

Reference to coarguments in (26) would seem to correctly allow *sig* in (29) where it is the subject of a small clause complement rather than a direct object as in (27). However, such reference is in fact redundant with the local nature of the inherent reflexivity of predicates. Since predicates differ from one-another in their inherent reflexivity, the latter must be specified as part of their lexical semantics. But, then, as a type of lexical specification, we will not expect it to be able to refer to phrasal levels any more than -say- subcategorization. The configuration in (29) will then be neutral with respect to inherent reflexivity for the same reason that *consider* does not select (/subcategorize for) the subject of its complement (cf. *I consider [there to have been too many people]*, etc.). By contrast, the predicate *attack* of (27) can naturally be regarded as inherently irreflexive, barring *sig* for that reason. In particular, if we take the conditional *sig* Ψ *inherent reflexivity* which emerges from Kiparsky's account and that the present perspective attributes to WA, we note that it is logically equivalent to *not-inherent reflexivity* Ψ *not-sig*, where we then only need to interpret *not-inherent reflexivity* as "inherent irreflexivity". This will directly exclude *sig* in inherently irreflexive (27) and allow it in (29), which is not inherently either reflexive or irreflexive for the reasons just reviewed, making the reference to coarguments in (26) superfluous, like the rest of it.

In regard to the local nature of inherent reflexivity recall that we have also seen above (cf. (16), (17)) that phrasal constructions or discourse can also create conditions that are favorable or unfavorable to coreference. The latter observation stands, the present point being only that when those conditions arise from lexical semantics, they will exhibit the locality typical of lexical specifications. We must note in passing a class of apparent exceptions to such strict locality, however, represented by possessives, as in inherently reflexive *John lost his cool*, versus irreflexive *John was getting on his nerves*. This may indicate that, as determiners, such possessives are heads, making traditional nouns phrases "Determiner" Phrases (Abney 1987). As heads, they would then be locally related to the higher predicate.

Summing up, while Kiparsky’s account relies on a link between lexical inherent reflexivity and [-obviative] to license *sig* in (28), such a link may just as well be stated directly as in the WA approach, dispensing with both (26) and the [-obviative] feature. This is a welcome result given that (26) is massively redundant with RE, while the locality conditions it stipulates are just those that one expects from all things lexical anyway.

This concludes the discussion of the WA principle, which I will argue can derive the effects of Rizzi’s Chain Condition (2) above. To do so, we first need to advance the claim that syntactically derived subjects are semantically weak antecedents, the task of the next section.

4. OPTIMAL ANTECEDENT

A major insight into the locality conditions governing the interpretation of reflexives was Chomsky’s (1973) “Specified Subject Condition” (SSC), identifying intervening subjects as blockers. This condition bore a curious resemblance to the well-known fact that many reflexives are “subject-oriented”, raising the possibility that the interpretation of reflexives is simply “subject-seeking”, hence stopping at the nearest subject as in Chomsky’s SSC. However, an apparent fly in this ointment is the fact that some reflexives do not appear to be subject oriented, and yet still obey the SSC. Well, it turns out that the WA principle (15) can now remove this oddity, hence restoring the close correlation between antecedents and blockers. The reason is that the reflexives that fail to display subject-orientation, as in (30) below, are those that qualify as strong under WA (15).

(30) I talked to Mary about herself

In (30), we may assume that, while the subject would provide for a more natural or felicitous coreferential relation, morphologically strong *herself* is able to overcome the odds, as in the vicarious coreference case *Ringo fell on himself* of (25) above. The Italian contrasts in (31), from

Giorgi (2007, refs.) are telling in this regard.

(31) a. Ho informato Gianni_i della propria_i promozione a direttore
 I-have informed Gianni of-the own promotion to director
 “I informed Gianni_i about his_i promotion to director”

b. Gianni mi ha informato su di sé /su se-stesso

Gianni me has informed on of self on self-same
 “Gianni informed me about himself”

- c. Ho informato Gianni_i *su di sé_i /su se-stesso_i
 I-have informed Gianni on of self on self-same
 “I informed Gianni about himself.”

In (31b, c), we see that *sé* displays clear subject orientation, while *se-stesso* does not. If subjects are default antecedents, then, in the WA-based account, this follows from the fact that *sé* is not as strong on the scale in (15b) as *se-stesso* or English *herself* of (30). Possessive *proprio* of (31a), on the other hand, does not display such orientation, suggesting that it must be a strong anaphor like *se-stesso* and unlike *sé*. Putting its morphology aside for just a moment, other diagnostics, applied in (32)- (34) below, independently support this conclusion.

- (32) a. ?? Ringo cadde su di sé_S
 Ringo fell on of self
 ‘Ringo fell on himself (?? ‘his statue)’
- b. Ringo cadde sul (suo) proprio_S piede
 Ringo fell on-the his own foot
 ‘Ringo fell on his (‘his statue’s) foot’
- (33) a. *Ringo si_S esaminava la mano
 Ringo to-self examined the hand
 ‘Ringo_i examined his_i (* “ his statue’s) hand’
- b. ?? Ringo esaminava la sua_S mano
 Ringo examined the his hand
 ‘Ringo_i examined his_i (?? “ his statue’s) hand’
- c. Ringo esaminava la (sua) propria_S mano
 Ringo examined the his own hand
 ‘Ringo_i examined his_i (“ his statue’s) own hand’
- (34) a. Italian: Gianni é il (suo) *(proprio) medico
 Gianni is the his own doctor
- b. Russian: Ivan svoj *(sobstvennyj) vrach
 Ivan (is) self’s own doctor
- c. Icelandic: Jón er sinn *(eiginn) lækni
 Jón is self’s own doctor

The Italian examples in (32)-(33) are based on Giorgi (2007), who notes that, while weaker forms *si* (33a), *sé* (32a) are excluded in vicarious coreference, as was also shown in (25), possessive *proprio* (32b), (33c) is not, hence paralleling stronger form *se-stesso* or English *himself* (cf. (25)) in this regard. We find as well that both Italian *suo* (33b) and English *his* are less felicitous in such contexts than their corresponding strong counterparts *suo proprio*, *his own*, as we would expect from the fact WA is orthogonal to the reflexive/ pronoun distinction. Contrasts are even clearer in (34), involving the irreflexive relation *X is Y's doctor* (X Y). Here, simple possessive *suo* is sharply deviant in Italian (34a) as are its counterparts in English and other languages (34b, c), while corresponding stronger forms like *his own* are acceptable. The point of relevance in (32)-(34) is that, its apparent morphological simplicity notwithstanding, possessive *proprio* behaves systematically like a strong form relative to WA effects, so that its lack of subject orientation in (31a) can be subsumed under the account of (30). Since *proprio*'s identity with adjunct *proprio* of *suo proprio* "his own" cannot be an accident, a plausible solution to the morphological puzzle would be taking this element to have the complex, but abstract, morphological structure *[e]-proprio*, involving adjunction to an empty head. More crudely, one could say that the status of *proprio* as a semantically strong element is "analogical" to that of *suo proprio*, where such strength is visibly grounded in morphology.

If exceptions to subject orientation as in (30), (31a) are thus due to the workings of the WA principle (15), then, indeed the generalization holds that subjects, which are the prototypical blockers as in Chomsky's SSC, are also the prototypical antecedents. However, in order for the WA principle to have this desirable effect, it must be the case that the latter principle is set in motion by degenerate antecedency just as if the latter was in fact a subcase of inherent *irreflexivity*, a point that will be critical to deriving the effects of the Chain Condition.

The study of Long Distance anaphora (LDA), which flourished through the 1980s, challenged Chomsky's SSC and its descendant various versions of Principle A of (1) above. It did not challenge, however, the fundamental isomorphy of antecedent and blockers that the SSC would have suggested, though. In fact, it strongly confirmed it. First, as argued in Burzio (1996), both subject-orientation and subject-blocking have the same class of exceptions. In particular, "experiencers" are unique among objects in their ability to both antecede subject-oriented reflexives and to block LD relations, as if there was a "Specified Experiencer" Condition parallel to the SSC. See Burzio (1996) for examples, references and discussion. What this suggests of course is that the notion at play is one of syntactic/ thematic

prominence, met by both subjects and experiencers (cf. Giorgi 1994), both antecedent and blockers tapping into that same notion. Secondly, in LDA relations, subject blockers form the hierarchy in (35), from Burzio (1996) (See also Menuzzi 1999, ch. 1).

(35) Subject of: Indicat. >> Subjunct. >> Infinit. >> small clause >> NP

The hierarchy in (35), which effectively expands Chomsky's SSC into a family of effects, holds cross-linguistically, in the sense that any language that allows LDA with any complement in (35), will also allow it with any of the complements to its right. What (35) suggests is that subject prominence is enhanced by the inflectional/ agreement system that the subject is implicating, tense playing a significant role, as in the minimal Icelandic contrast in (36).

- (36) a. (Maling 1984) Jón_i upplýsti hver hefði barið sig_i/ hann_i
 Jón revealed who had(subjunctive) hit self him
 "Jón_i revealed who had hit him_i"
- b. (Anderson 1986) Jón_i skipaði mér að raka sig_i/ *hann_i
 Jón ordered me that shave(infinitive) self/ him
 "Jón_i ordered me to shave him_i"

In the subjunctive case in (36a), the reflexive is felicitous, but the pronoun is also acceptable, indicating that the blocking effect offsets a violation of RE (4). In the infinitival case in (36b), however, the blocking effect must be weaker consistently with (35), now no longer motivating a violation of RE, and hence excluding the pronoun. Burzio (1996) notes further that, just like blockers, antecedents also manifest the same hierarchy of prominence as in (35). This can be shown, for example, with the Russian cases in (37).

(37) Timberlake (1979)

- a. I on_i ne prosil nikogo iz nix [provesti sebja_i/ ego_i v nuznoe mesto...]
 and he not ask any of them lead self/ him to needed place...
 "and he_i did not ask any of them to lead him_i to the necessary place..."
- b. I on_i stydilsja poprosit' kogo-libo iz nix [provesti (?)(?)sebja_i/ ego_i v nuznoe mesto]
 and he embarrassed ask any of them lead self/ him to needed place
 "and he_i was embarrassed to ask any of them to lead him_i to the necessary place..."

We can see that, when the antecedent is the subject of a tensed clause as in (37a), the reflexive

is felicitous, but the pronoun is also allowed --a pattern analogous to that of (36a). However, when the antecedent is the subject of an infinitival, *to ask* in (37b), the reflexive is sharply degraded despite the fact that the blocker, also the subject of an infinitival sentence (*to lead*), is of the same type in both cases. The context in (38) also provides concurring evidence.

(38) Russian (Timberlake 1979)

- a. ... on_i ne mog najti svoju_i/ *ego_i xatu
 he not able find self's/ his hut
 "...he_i was unable to find his_i house"
- b. Roditeli proposili Serezu_i ne slusat' svoju_i/ ?ego_i rakovinu
 parents ask Sereza not listen-to self's his shell
 "His parents asked Sereza_i no to listen to his_i sea-shell"

I suggested in discussing the effects of person-agreement in sect. 2 above (ex. (12)) that binding of possessives is akin to LDA. The cases in (38) confirm such conclusion in so far as the coreferential pronoun, sharply excluded in strictly local contexts in Russian, is not fully ungrammatical in (38b). Putting aside the exact nature of the blocking effect in these cases for a moment, we can see again that when the antecedent is the subject of an infinitival as in (38b), the reflexive shows indirect signs of degradation in virtue of the quasi-grammaticality of the pronominal option, compared with the case in (38a), where the antecedent is the subject of a tensed clause and the pronoun is more sharply excluded.

This parallelism of antecedency and blocking hierarchies points to the conclusion that interpretation of reflexives consists simply in identifying the most prominent antecedent, defined along the lines of (39) below. Since syntactic locality enters into the definition of "prominent" but does not exhaust it in (39), certain classes of local elements will block, while others will not.

(39) OPTIMAL ANTECEDENT: Interpret an anaphor as bound by the most prominent element, where "prominence" is defined by an appropriate combination of (a-c) below.

- a. Thematic (and discourse) prominence:
 Agent, Experiencer >> Theme (Topic >> non-topic)

- b. Morphological prominence (Type of inflection agreeing with the antecedent):

Indic. >> Subjunct. >> Infinit. >> Small clause >> NP

c. Locality: Syntactic proximity to the anaphor

In general, (39) will correctly predict that a remote antecedent will tend to be higher on the hierarchy in (35) than any potential blocker. Languages differ on the exact distribution of LDA, suggesting the relative weights of the different factors in (39) is modulated, but known cases have blockers and antecedents on the same point of the scale in (35) at most, e.g. both subjects of indicative clauses in Faroese (Burzio 1996 and refs.), or both subjects of infinitives, as in the (marginal) Russian example in (37b). The approach in (39) will also immediately account for the fact that any reflexive which can take object antecedents locally will be strictly subject (/experiencer) oriented in LD relations if any obtain (see Giorgi 1984, Maling 1986, Menuzzi 1999, ch. 1). Hence the local case in (31a) above, in which *proprio* has an object antecedent contrasts with (40) below, where such antecedent is ungrammatical.

- (40) Gianni_i ha informato Maria_j [di aver parlato colla propria_{i/*j} famiglia]
“Gianni_i informed Maria_j of having spoken with his_i/ *her_j own family”

The reason for this is that non-experiencer objects fail to be more prominent than subjects on any count in (39). An intervening (= local) subject will thus always prevail over a remote non-experiencer object. However, we would also have to assume here that the effects of the WA principle, which are of a sufficient magnitude (with a strong anaphor like *proprio*) to offset the greater prominence of a subject in (31a) above, are not of a sufficient magnitude to offset the thematic/ morphological prominence of a subject (in (40) the PRO subject of the bracketed complement) when such prominence is enhanced by locality (39c).²

Strictly local reflexives (motivating the original version of the SSC/ Principle A) can also be integrated into the approach in (39) if we assume that they trigger an enhanced version of locality (39c) that categorically outweighs (39a, b). The morphological basis for this enhanced effect appears to be overt agreement with the antecedent (Burzio 1996). That is, the partition of reflexives into local and LD appears to mirror the partition between reflexives that agree by approximation and hence obey the hierarchy in (7) and reflexives that are inflected

² A further important assumption that must be made on the nature of Optimal Antecedent (39) is that it must not be allowed to interact freely with RE (4), lest a sentence like *John_i thought Mary saw him_i* be inexpressible in any language that has reflexives. The reason is that free interaction would cause pronoun *him* to lose to a reflexive by RE, which then would or could, depending language-specific detail, be interpreted locally under (39), yielding the structure *John thought Mary_j saw herself_j* as the optimal, but unwanted, outcome. To obtain the correct results one must ensure that, while (39) determines the interpretation of a reflexive, RE can only compare candidates that have the same interpretation, hence excluding the set { *...him_i ...self_j* }. This formal issue is addressed in Wilson (2001). See also Burzio (2010) for further discussion.

and are thus immune to the latter hierarchy. We have seen that, beside being overtly inflected, English reflexives are also strong anaphors. It is clear, however, that only the former property and not the latter reflects on the locality issue. This is shown by Italian *proprio*, which on the one hand is strong like English reflexives (21a), (32b) and yet has LD properties (40). The reason, on the present perspective, is that it is uninflected (exhibiting no agreement with the antecedent), resulting in the usual behavior of such elements, namely person restrictions as in (41a), and ability to take impersonal antecedents (via the “zero-feature” match), as in (41b).

- (41) a. Gianni_i ama/ *Io_i amo la propria_i famiglia
 Gianni loves/ I love the own family
- b. Si_i pensa sempre alla (*sua) propria_i famiglia
 One thinks always to-the his own family

The case (41a) parallels (8b) above where *sé* rejects a 1st person antecedent. Case (41b) shows that, while *proprio* alternates with *suo-proprio* with 3rd person antecedents as in (32), (34) above, this is not so with impersonal antecedents, the reason being that, while on its own *proprio* is zero person like the impersonal, *suo* is a 3rd person pronoun, yielding a mismatch like that of (11a) above.

A systematic class of exceptions to the LD character of uninflected reflexives is represented by clitics like Italian *si*, which, while uninflected, are strictly local (and strictly subject-oriented Bno experiencers), perhaps due to a special relation of clitics to verbal inflection, itself strictly related to the local subject. Finally, one apparent discrepancy for (39) above are cases like **John thought that himself would win* that violate the former Tensed-S Condition (Chomsky 1973) or its descendants. Here there is a blocking effect, which is known to obtain even with LD anaphors, but there is no obviously competing antecedent. On this effect, I follow Rizzi (1989) in postulating the principle in (42), which bans anaphors in positions that trigger verb agreement.

- (42) * anaphor-agreement

The effect of (42) is different from, but perhaps still relatable to, the system in (39). If one takes an antecedent-anaphor relation to be essentially an agreement relation, then an agreeing inflection would act as a local blocker in that sense. (See Woolford 1999 and refs. for further relevant discussion). Note as well that, while (42) may appear to have the character of an

inviolable constraint --an anomaly for the present approach, there are other effects which are arguably of the same family and yet clearly violable. Thus possessives, which are related to head nouns either by agreement or by Case (Genitive), exhibit mild opacity effects as we have seen above (12b), (38b), and tolerate only reflexives of the LD type, witness *John read his/ *himself's book*, an effect plausibly relatable to (42) (see Burzio 1996).

In sum, there is good reason to believe that reflexive antecedency hinges critically on some notion of prominence, and that such prominence is the basis of competition among potential antecedents, resulting in well known locality effects. We have also seen that antecedent prominence is relevant to the WA principle as well: locally, a less prominent antecedent such as an object can be “rescued” via the use of a strong anaphor, as in (30), (31a) above. If this correlation holds generally, we predict that any antecedent that is “weak” for the WA principle, hence requiring a strong anaphor locally, will also be weak (i.e. not prominent) for the competition of (39) and hence always fail to serve in LD relations. While this seems true for objects antecedents witness (40), we have also encountered other cases beside objects that require strong anaphors. So, we have inherently irreflexive cases like (13b) or (27). Yet, it will not be possible to test for LD relations with those, since we have seen that the domain of inherent reflexivity/ irreflexivity does not extend beyond the predicate’s lexical frame, hence not to LD relations. But we still have the cases of vicarious coreference of (25), (33) above with which to test. The results of this test are in fact provided by Giorgi (2007), in the form of examples like (43).

- (43) Ringo temeva che i visitatori danneggiassero il proprio_S viso.
 Ringo feared that the visitors might-damage the own face
 “Ringo_i feared that visitors might damage his_i face (* the face of his_i statue)”

As Giorgi notes, while *proprio* can express vicarious coreference locally as in (33c) above, it cannot do so in LD relations, as (43) shows. Hence it must be the case that imperfect coreference simultaneously both detracts from the prominence required by LDA in addition to the factors listed in (39), and from the semantic naturalness required by weak anaphors locally, suggesting the two notions (prominent antecedent; natural or inherent reflexivity) are substantially in tune with one-another.

This immediately places us within striking distance of the Chain Condition in (2). Should it turn out that syntactically derived subjects are weak antecedents in virtue of being excluded in LDA, we will then automatically expect them to be locally excluded with weak anaphors like *si*, QED. That this is indeed the case has in fact been independently shown in ReVEL, special edition n. 4, 2010.

both Giorgi (1984) and Belletti and Rizzi (1988), on the basis of contrasts like the one in (44).

(44)

- a. Gianni_i sembra [e_i essere efficiente] ai propri_i colleghi
Gianni seems to-be efficient to-the own colleagues
- b. *Gianni_i sembra [e_i essere efficiente] a chiunque sostenga la propria_i candidatura
Gianni seems to-be efficient to anyone-who supports the own candidacy

The derived subject of *seem* is a proper antecedent to local *proprio* in (44a), but not to LD *proprio* in (44b). Evidently, while a derived subject can in principle carry any theta role warranted by its base position, its presence in a position that has no theta role must contribute negatively to the notion of prominence of (39). The link between such prominence and the WA principle independently established by both object antecedents and vicarious coreference will now empower the latter principle to exclude cases like (45a) ((3) above) without any Chain Condition, imposing a stronger anaphor like *se-stesso* instead, as in (45b).

- (45) a. *Gianni *si* sembra intelligente
Gianni to-self seems intelligent
- b. Gianni sembra intelligente perfino a se-stesso
Gianni seems intelligent even to self-same

The present account thus postulates a single notion of weak antecedent that both rules out LDA under (39) and requires strong morphology locally under WA (15). Its superiority is evident in both the fact that the WA principle is independently motivated by cases of inherent irreflexivity as we have seen above, or like (46) below, and the fact that the Chain Condition would hold no sway over LDA cases like (44b) or in any event could make no distinction between (44a) and (44b).

- (46) Gianni *mi* / ?**si* dava sui nervi
Gianni to-me/ to-self gave on-the nerves
“Gianni_i was getting on my/ ?*his_i nerves”

Clearly, the Chain Condition could not extend to the empirical domain of WA (15) and cases like (46) either. On the one hand there is no reason to take *dare* “give” to have a derived subject. On the other, it is clear that it is the *weak* status of *si* and not its status as a clitic per se that results in its ungrammaticality, since the English counterpart (5b) is correspondingly

deviant with weaker (but not clitic) *his*, and more felicitous with stronger *his-own*.

The demise of the Chain Condition has consequences beyond the scope of the present article. In particular, it will challenge the conclusion of Belletti and Rizzi (1988) that reflexive cases like (47) are ungrammatical due to a violation of the latter Condition and therefore that predicates of this class have syntactically derived subjects.

- (47) Gianni *mi/ *si* colpisce per la sua prontezza
Gianni *me/ self* strikes for the his promptness
“Gianni strikes *me/ *himself* for his promptness”

Rather, from the present perspective it would seem plausible to take such cases to violate WA because of inherent irreflexivity/ weak antecedency of the subject, which is in this case a “Theme”, and hence take (47) to be parallel to (46), both instantiating the flip side of the coin compared with those inherently reflexive predicates that we have seen *require* those weaker reflexive forms (discussion of (23)) which are here excluded.

5. CONCLUSION

Pronominal elements differ from one-another along two main dimensions. On the one hand, reflexives differ from pronouns by lacking independent reference. On the other, both reflexives and pronouns vary on a scale of morpho-semantic strength. I have argued that this two-dimensional space can be successfully navigated only by means of competing constraints. A principle of Referential Economy is needed to promote reflexives over pronouns, but must be violated to satisfy either agreement or locality restrictions on reflexives. It is also violated to satisfy a Weak Anaphora principle that ties reduced morphology to semantic conditions favorable to coreference, and conversely an expanded morphology to unfavorable semantic conditions.

I have further argued that locality conditions on reflexives are themselves to be interpreted in terms of competition among potential antecedents and that the notion of antecedent strength plays into the same conditions favoring/ disfavoring coreference that activate the Weak Anaphora principle. Thus weak antecedents both a) require strong reflexive morphology locally, and b) fail to serve in long-distance relations by losing to local antecedents/ blockers.

Since syntactically derived subjects are known to fail in long-distance relations and are thus weak antecedents in the present terms, it follows that the Weak Anaphora principle

will suffice to exclude morphologically reduced reflexives like clitics with such antecedents, hence dispensing with the need for a specifically syntactic restriction like Rizzi's (1986) "Chain Condition".

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