

**Alessandra Giorgi**  
**On the nature of long distance anaphors<sup>□</sup>**

**Abstract**

I consider two interpretive properties of long distance anaphors: a) they only have a *pure-reflexive* reading, in the sense that they fail to refer to portrayals of the antecedent, and b) whenever possible, they must be interpreted as *de se*, or better to say, as *first-personal*.

Long distance anaphors seem to be interpretively parallel to local reflexive construals such as those seen in inherent reflexivity and constructions of inalienable possession. Moreover, in some languages – as in Chinese and Italian – long distance anaphors can also be locally bound, and in such cases, they pattern with *self*-anaphors, rather than with inherent reflexives.

To account for this pattern, I propose that long distance anaphors, together with the local construals mentioned above, are the spell out of an unsaturated position, saturated in the course of the derivation via theta-identification with the antecedent.

**Key words:** anaphors, reflexives, near-reflexivity, pure-reflexivity, *de se*, first-personal.

**Introduction**

In this paper I'll propose that long distance anaphors – henceforth, LDAs – are the spell out of an initially unsaturated position, saturated in the course of the derivation via theta-identification with the antecedent. This proposal is motivated on the basis of the analysis of two interpretive properties of LDAs holding cross-linguistically: the unavailability of the near-reflexive interpretation, and the obligatoriness of the *de se* reading. This paper therefore aims at solving the questions related to the interpretations of the anaphoric items and at explaining why certain anaphors must have, or conversely cannot have, a given interpretation.<sup>1</sup>

I'll consider the distribution and the properties of certain nominal expressions in Italian and Chinese – i.e., mostly the possessive *proprio* and the reflexive *ziji* respectively – that are uncontroversially *anaphoric* and uncontroversially *long-distance*. Both of them in fact cannot receive their interpretation under deixis and can refer to something lying outside their own clause. However, the notion of LDA will not be discussed in detail here, given that the issue would constitute by itself a topic of a monographic investigation.

In the literature on the subject, starting in the late 70's, anaphors have been classified according to various dimensions. An obvious classification is based on their morphological properties: An anaphor can in principle be specified with respect to features such as person, number, gender, and case, or be unspecified with respect to any of those. For instance, the Chinese anaphor *ziji* (self) lacks any specification, contrasting with the English anaphor *himself*, which is 3<sup>rd</sup> person, singular, masculine and accusative. From this point of view, Chinese and English occupy two diametrically opposite positions along this dimension.

Anaphors have also been classified according to their binding domains. For instance, considering again English and Chinese as the two extremes, *himself* is a clause-bound anaphor, whereas *ziji* has an apparently unlimited domain of binding.

The morphological properties have often been connected with the differences in the domain of binding, given the basic, and cross-linguistic (quite) consistent, observation that the anaphors which exhibit a rich(er) feature specification are often to be bound in a small(er) domain. Various theories have capitalized on this fact, usually taking the lack of features as the primitive notion providing an explanation for the lack of clause boundedness.<sup>2</sup>

However, anaphors also differ with respect to their interpretive properties, but this consideration has sometimes been neglected in the literature. In these pages I'll investigate this point and provide an analysis of two semantic characteristics of LDAs. I'll show that an analysis of the meaning, combined with morphosyntactic considerations, is important in order to formulate more adequate principles of binding. As I mentioned above, I'll consider the unavailability of the so-called *near-reflexive* reading for LDAs and the fact that, whenever possible, they are interpreted as *first-personal* (*de se*).

The term *near-reflexive* is taken from Lidz (2001a, 2001b) and the term *first-personal* from Higginbotham (2003). The so-called near-reflexive interpretation, as opposed to the pure-reflexive one, includes all cases where the anaphor is not *identical* to the antecedent. This term identifies an anaphor/antecedent relation, in which the two do not refer to the same actual *object*, but only to something which can be identified by means of the same *name*. The *first-personal* interpretation concerns those sentences where, roughly speaking, a subject has a thought about himself knowing that this is the case. Both notions will be better clarified in the course of the exposition.<sup>3</sup>

Interestingly, with respect to near-reflexivity, LDAs pattern together with local construals such as inalienable possession and inherent reflexive structures, and contrast with *self* anaphors. This fact cannot be taken as an accident and calls for an explanation. Moreover, LDAs exhibit these properties both in languages such as Italian and in languages such as Chinese, which are very different from a typological point of view.

I'll argue in favor of the idea that the peculiarities of the interpretation of LDAs are determined by their very nature, which, as a matter of fact, does not vary across languages. By this I mean that it doesn't need to be stipulated as a property of one or the other lexical item.<sup>4</sup>

Though acknowledging the connection between morphological properties and the extension of the binding domain beyond clause boundaries, I'll propose that the perspective must somehow be reversed. I'll show that it is not the case that anaphors need an antecedent because they lack features, but on the contrary, that they *cannot* be fully specified with respect to morphological features, otherwise they wouldn't have the possibility of reaching an antecedent. An important consideration following from this discussion will be that the often-postulated distinction between coreference and bound variable is not fine-grained enough to account for the interpretive properties considered here.

This paper is organized as follows: In the first section I'll consider and discuss the results achieved by Lidz (2001a, 2001b), concerning the near-reflexive contexts, crucially extending, and amending, his analysis to LDAs. In the next section, I'll sketch an account for the observed phenomena, proposing and discussing the hypothesis. In the third, I extend the hypothesis to cover also the first-personal contexts, showing that those facts fall out as a necessary corollary. In the fourth, I'll discuss the import of the analysis with respect to the bound/referential classification of pronominal forms. Finally, I conclude and propose some lines for further research.

## **1. Near-reflexives: *Madame Tussaud*, a second tour**

Jackendoff (1992) points out that anaphors in English can have – under certain conditions – a class of readings in which they are not understood as “identical” to their antecedents. Among the contexts he considers is the ‘statue’ reading in a *Mme. Tussaud setting*. Namely, if we take a scenario like the Wax Museum, we might imagine that some famous character

visiting it sees his own wax statue. Jackendoff notices that in this scenario a sentence such as (1) can mean (2), though it cannot have the meaning in (3):

- (1) Ringo fell on himself (Jackendoff's (13))
- (2) 'The actual Ringo fell on the statue of Ringo' (Jackendoff's (13a))
- (3) 'The statue of Ringo fell on the actual Ringo' (Jackendoff's (13b))

Namely, sentence (1) can be interpreted in the following way: wandering around at Mme. Tussaud Wax Museum, the famous Beatle Ringo Starr fell on his own statue, as in (2). Lidz (2001a, 2001b) dubbed these readings as *near-reflexive*, as opposed to the *pure-reflexive* ones, i.e., the reading in which the anaphor and the antecedent refer to the same identical object. The other interpretation, in which the statue fell on the real person – exemplified by (3) – is not available, as Jackendoff noted. The analysis he provides is mainly devoted to the explanation of the impossibility of this interpretation.

Here, I don't have anything to add to the discussion of this particular point. I devote these pages to another issue related to these observations – i.e., the distribution of the various kinds of anaphors in this context and in particular to the fact that LDAs, like Italian *sé* (self) and *proprio* (self's), are incompatible with the near-reflexive reading,

### 1.1. Clause-bound anaphors and near reflexivity

Burzio (1994) noticed that in Italian the statue reading – namely the interpretation in (2) – is only available with the complex anaphor *se stesso* (lit: self-same) and not with the simple anaphor *sé* (self). Burzio gives the following examples:<sup>5</sup>

- (4) Ringo cadde su se stesso (Burzio's (27a) The judgment is mine)  
Ringo fell on self-same  
'Ringo fell on himself/his statue'
- (5) Ringo cadde su di sé (Burzio's (27b). The judgment is mine)  
Ringo fell on of self  
'Ringo fell on himself/\*his statue'

Note that *se stesso* is a strictly local anaphor, and *sé* is a subject-oriented anaphor which can also be long distance bound. As shown in example (5), however, *sé* (self) cannot have the near-reflexive reading, even when it is bound by the subject of its clause. In addition to this contrast, Burzio (1994) also notices that the reflexive clitic construction with *si* is not available with the near reflexive interpretation:<sup>6</sup>

- (6) Ringo si è sputato addosso (Burzio's (27c))  
Ringo to-self spat upon  
'Ringo spat on himself/ \*on his statue'
- (7) Ringo si è rotto un braccio (Burzio's (27d))  
Ringo to-self broke an arm  
'Ringo broke his arm/ \*the arm of his statue'

*Si* is strictly local and patterns with *sé*, and not with *se stesso*. Simple locality considerations

therefore, cannot predict the paradigm in (4)-(7), because all the relations seem to be local in the same way.

Burzio (1994) attributes this effect to the morphological properties of the anaphors. He distinguishes *weak* anaphors and *strong* anaphors and provides a scalar classification of the reflexive forms in the various languages. In his theory, morphologically complex anaphors are strong, whereas simple(r) anaphors are weak(er). Inherent coreference requires weak anaphors. The statue reading is not a case of inherent coreference, therefore strong anaphors – i.e., *self*-anaphors – must be used. Burzio states the *Weak Anaphora Principle*, which in his formulation is an *if and only if* condition:

(8) Inherent coreference  $\square$  Weak anaphora

His principle must be understood as a condition holding on the relation between the semantic properties and the morphological form of the anaphors.

This proposal accounts in an elegant way for the Italian and English cases, but seems to run into trouble with examples in Chinese, discussed by Lidz (2001a, 2001b) and Liu (2003). In Chinese there are two different anaphoric forms. A morphologically simple one, *ziji* (self), and a bi-morphemic one, *ta-ziji*, where *ta* is a pronominal form. Literally therefore, the second form is *him-self*. Consider the following examples:

- (9) Mao Ze-Dong ba *ziji*<sub>s</sub> qiangbi le (from Liu, 2003, ex. 3, subscript mine)  
 Mao Ze-Dong BA self shot ASP  
 Mao Ze-Dong shot himself'

- (10) (Zai *ziji*-de tongxiang qian), Jiang Jie-Shi yong gunzi da-le *ta-ziji*<sub>s</sub> yi-xia  
 (from Liu, 2003, ex.4, parentheses and subscript mine)  
 (At self-DE statue before), Jiang Jie-Shi use cane hit-ASP himself one-cl  
 (In front of his statue), Jiang Jie-Shi uses a cane to hit himself

Lidz (2001a, 2001b) and Liu (2003) point out that both the anaphors *ziji* and *ta-ziji* can have a near-reflexive interpretation – i.e. they can refer to the statue, whereas the proper name refers to the actual person. Under Burzio's analysis the interpretation of *ziji* in (9) is unexpected, given that *ziji* qualifies as a weaker anaphor with respect to *ta-ziji*.<sup>7</sup>

To solve this kind of problems, arising in a variety of languages, Lidz (2001a, 2001b, 2001c) proposes a principle similar to Burzio's, which is supposed to overcome these difficulties. The principle in question is called *Condition R*. Instead of connecting the interpretive properties of the structure directly with the morphological characteristics of the anaphor, Lidz links them to the properties of the predicate appearing in the sentence, as I'm going to explain.

However, in his approach, the anaphors must still be classified on the basis of the possibility of instantiating the *near-reflexive function*. In other words, anaphors are hypothesized to carry in themselves, as a lexical property, the possibility of taking a *near-antecedent*.

Lidz represents the two readings in the following way (from Lidz, 2001a, ex.15a and 15b):

- (11)  $\square x [P(x,x)]$  (Semantic/ Pure-reflexive)  
 (12)  $\square x [P(x, f(x))]$  (Near-reflexive)

Observe that in the near-reflexive reading exemplified by (12) the predicate holds of  $x$  and of a *function* of  $x$  – instead of directly  $x$ , as in (11) – yielding therefore the *proxy* reading. Lidz’s Condition R has the following format:

- (13)  $\exists x [P(x,x)] \supset (\theta_1 = \theta_2)$  (From Lidz, 2001a, ex.17)

This condition states that if a predicate is semantically reflexive – where semantic reflexivity excludes the availability of near-reflexive readings – it must be lexically reflexive. In other words, the semantic property of inhibiting the near-reflexive reading is due to the identity established *in the lexicon* between the theta-roles  $\theta_1$  and  $\theta_2$ . Conversely, if a predicate is lexically reflexive, then it must be semantically reflexive – i.e., it must exclude near-reflexivity. Such an approach, more or less explicitly, assumes that a semantic reflexive predicate is such by virtue of theta-identification.

In this way, Lidz can account for the near-reflexivity of *ziji*. *Ziji* – in his terms – introduces the near-reflexive function in (12), therefore (13) does not apply.

On the other, however, Condition R predicts that in absence of lexical reflexivity, an anaphor, if bound by a co-argument, must be a near-reflexive. Given that, as pointed out by Burzio, *sé* cannot be interpreted as a near-reflexive, it follows that it should be a lexical reflexive. In this sense, therefore *sé* is taken to contrast with *ziji* in not being able to instantiate the near-reflexive function.<sup>8</sup>

Independently of the solution which might be eventually proposed for these cases, I would like to stress two important conclusions coming out of Burzio’s and Lidz’s discussion of Jackendoff’s cases. On one side, I illustrated Burzio’s empirical observation concerning the distinction between *sé* and *se stesso*, and his suggestion that this fact might be connected to the morphological properties of the anaphors. On the other, I reviewed Lidz’s mention of theta-identification as the relevant mechanism inhibiting near-reflexivity. However, the question concerning the interpretation of non-clause-bound anaphors was not raised by either scholar. Importantly, Lidz (2001a) points out that his theory has nothing to say with respect to non-locally-bound pure-reflexives.

In the next section, I’ll argue that the mechanism of theta-identification can be taken to be the relevant notion with respect to non-local reflexives as well, even if I’ll adopt here a different perspective with respect to Lidz’s original suggestion.

## 1.2. Long distance anaphors and near-reflexivity

It appears that both in Italian and Chinese, LDAs do not admit the near-reflexive reading. Interestingly, some anaphors can be both long distance and locally bound – as both *proprio* and *ziji* can. However, they permit the near reflexive reading under local binding, but turn to pure reflexives if bound non-locally. In this section I’m going to contrast local binding examples, with the long distance ones. Consider first the so-called *inherent* reflexive structures:<sup>9</sup>

- (14) Gianni si ammira  
Gianni si-admires  
‘Gianni admires himself/ \*his statue’
- (15) Gianni si lava  
Gianni si-washes

- (16) 'Gianni washes himself/ \*his statue'  
 Gianni si pettina  
 Gianni si-combs  
 'Gianni combs his hair/\*his statue'

In none of these cases is the near-reflexive reading allowed. Note that the corresponding sentence with a *stesso* anaphor, on the contrary, permits the near-reflexive reading:

- (17) Gianni ammira se stesso  
 Gianni admires same-self  
 'Gianni admires himself/ his statue'  
 (18) Gianni lava se stesso  
 Gianni washes same-self  
 'Gianni washes himself/ his statue'  
 (19) Gianni pettina se stesso  
 Gianni combs same-self  
 'Gianni combs himself/his statue'

These examples illustrate a contrast along the lines mentioned in Burzio (1994): descriptively, the *weakest* anaphoric form is exclusively a pure-reflexive. Consider now the local constructions involving *proprio*, given along with their *si* counterparts in (20)-(23):<sup>10</sup>

- (20) Ringo ammirò il proprio viso  
 Ringo admired self's face  
 'Ringo admired his face/ the face of his statue'  
 (21) Ringo si ammirò il viso  
 Ringo si-admired the face  
 'Ringo admired his face/ \* the face of his statue'  
 (22) Cadendo, Ringo ruppe il proprio piede  
 Falling down, Ringo broke self's foot  
 'Falling down, Ringo broke his foot / the foot of his statue'  
 (23) Cadendo, Ringo si ruppe il piede  
 Falling down, Ringo si-broke the foot  
 'Falling down Ringo broke his foot /\* the foot of his statue'

The examples in (20) and (22) can have the near-reflexive interpretation, meaning that Ringo admired the face of the statue representing him and that he broke the statue's foot, respectively. They contrast with the inalienable possession constructions given in (21) and (23), where the near-reflexive reading is impossible.<sup>11</sup>

However, both *proprio* and *ziji* disallow the near-reflexive reading when long distance bound:<sup>12</sup>

- (24) Ringo temeva che i visitatori danneggiassero il proprio viso  
 Ringo was afraid that the visitors might damage self's face  
 'Ringo was afraid that visitors might damage his face/ \*face of his statue'  
 (25) Mao Ze-Dong<sub>i</sub> yiwei Lisi zhuyi-dao ziji le

Mao Ze-Dong thought that Lisi noticed self ASP  
'Mao Ze-Dong thought that Lisi noticed himself/ \*his statue'

In both languages the statue reading is not available. The issue therefore is why *ziji* and *proprio* can instantiate the near-reflexive function in the local domain, whereas they cannot do it in the non-local one.<sup>13</sup>

From these observations it follows that the possibility of being interpreted as a near-reflexive cannot be considered as a property of certain anaphors *per se*. It also seems rather stipulative to account for these facts by simply proposing that long distance binding disallows the near-reflexive reading. This might be descriptively correct, but does not capture in a uniform way the observation that some local constructions, like inherent reflexivity and inalienable possession, disallow it as well.

The question therefore can be phrased in the following way: what is the property common both to inherent reflexive structures, to inalienable possession constructions, and to the LDAs, distinguishing them from the anaphors which allow the near-reflexive reading, like *self* anaphors – or *proprio* and *ziji* when locally bound?<sup>14</sup>

Notice also that the sentences in (17)-(19) in the pure-reflexives interpretation are not synonymous with their respective counterpart in (14)-(16). The intuitions are subtle, but systematic. In the latter series the inherent reflexive reading is the natural and 'normal' one. In the other set, a real reflexive reading is not available, and the subject seems to consider his body as an entity with an 'independent' existence. It would be desirable therefore, for a theory of anaphoric relations to capture these observations as well.<sup>15</sup>

Interestingly, Burzio (1994) points out that PRO cannot have a near reflexive reading either (from Burzio, 1994, exx. 28a and 28c), The subscript S stands for *statue*:

- (26) Ringo tried PRO<sub>S</sub> to fall/melt
- (27) Ringo never turns the heat on without PRO<sub>S</sub> beginning to melt

Along these lines, it can be observed that secondary predication is incompatible with a near-reflexive reading as well:

- (28) Ringo è uscito rotto  
Ringo left broken (\*as a statue)
- (29) Ringo went out broken (\*as a statue)

What properties are involved in the control phenomena in general, is still being debated.<sup>16</sup> Higginbotham (1997), along the lines of Williams (1994), proposed that a mechanism of *implicit anaphora*, crucially involving theta-identification, can account for the control cases in (26) and (27). Simplifying somehow, implicit anaphora relates the theta-position pertaining to the controller with the theta-position of the controlled subject. In this way, interpretation obtains independently of lexical insertion.

Even remaining neutral with respect to the control cases, it is quite uncontroversial that some mechanism of theta-identification is involved in structures such as (28), and its English equivalent (29).

## 2. The hypothesis

The proposal of this work is that the properties of the structures involving long distance anaphors, as well as reflexive construals such as inalienable possession and inherent reflexivity, can be accounted for by means of the following hypothesis:

- (30) a) An unsaturated position is saturated by means of theta-identification.  
b) LDAs, inalienable possession and inherent reflexivity are instantiations of unsaturated positions.

In other words, in all these cases, the anaphoric position – eventually realized as *zero* in inalienable possession – is saturated by means of the mechanism of theta-identification, along the lines of *implicit anaphora*, as proposed by Higginbotham (1997) for a totally different set of cases.<sup>17</sup>

An unsaturated position is to be understood as a position in the theta-grid which has not been assigned yet, and must be kept distinct from an *open* position, i.e. a variable, as will be discussed in section 4.

Under theta-identification, the antecedent and the unsaturated position cannot be kept distinct, as would be required on the contrary by the near-reflexive reading. The implicit anaphora hypothesis therefore immediately accounts for the facts in (14)-(16). It is intuitively reasonable to hypothesize that the *si*-structures are the ones in which a mechanism of implicit anaphora is obligatorily at work, whatever the analysis of the clitic *si* might be.

This way of looking at the facts is very similar to the proposal by Lidz (2001a, 2001b), who also considers theta-identification as the basic mechanism at work in these cases. In this kind of structures, in fact, the two theta-roles of the predicate are identified, and the predicate obtains the *typical* inherent reflexive interpretation we are familiar with, and which subtly but systematically distinguishes these cases from the corresponding ones with the *se-stesso* anaphor.<sup>18</sup>

As I will better discuss below, theta-identification is a *local* process and the apparent long-distance effect, typical of these anaphoric relationships, is due to the cyclic application of the process. Technically, any mechanism of theta-identification could in principle be adopted. In particular I'll refer to the one sketched in Larson and Segal (1995), who propose a system of semantic composition based on the Interpreted Logical Form.<sup>19</sup>

Recall also that the structures in (14)-(16) contrast with complex anaphoric forms, such as *se stesso* (lit: self-same), as illustrated by the example (17)-(19). Here the *linguistic formative* – adopting Higginbotham's (1997) terminology – *se stesso* (self-same) appears and the sentence can be interpreted as containing a near-reflexive. The implicit anaphora mechanism based on theta-identification is blocked by the presence of the linguistic formative itself – presumably in this case the *stesso* (same) part of the anaphoric expression.<sup>20</sup>

I would like to argue that this hypothesis also explains the impossibility of the near-reflexive reading with the inalienable possession examples – at least in Italian – and with the LDAs.

Let me consider LDAs first. I propose here that LDAs are the spell out of an unsaturated position, which percolates the syntactic structure. The position is saturated by means of theta-identification, at the relevant interpretive level, namely, at the level at which the Interpreted Logical Forms – as proposed by Larson and Segal (1995) – are construed. To this extent therefore, the LDA is the exact equivalent in the non-local domain, of the implicit anaphora construal holding internally to the clause.<sup>21</sup>

It is often observed in the literature, that LDAs are always the least marked items in the inventory of reflexive forms in the various languages. Interestingly, the notion of weak



anaphora proposed by Burzio (1994) stresses exactly this point.

This observation is accounted for in a simple and intuitive way under my proposal. It is rather natural to assume that, in order to mark an unsaturated position, languages select the least marked item existing in their inventory. One might adopt, to this purpose, a view such as the *competition model* proposed by Safir (2003a, 2003b): the least marked form is inserted in the Numeration, according to various considerations of economy of the derivation.<sup>22</sup>

In a way therefore, I'm claiming that Burzio (1994) was correct, but that his generalization holds at a different level. I'm proposing that morphological considerations affect only the way the Numeration is built and not the way the anaphor retrieves its antecedent.

In other words, according to the view I'm advocating here, the morphological properties of the anaphor – or of the anaphoric construal, such as the ones involving the clitic *si*, or *zero* as in inalienable possession – do not affect directly the way an antecedent is provided. What is crucial to this here is the possibility for an anaphor to be related to the antecedent via the implicit anaphora mechanism, which exploits theta-identification. In this way it is possible to extend the analysis beyond the domain of inherent reflexivity, providing a unified account for both the local cases and the long distance ones.

In Italian, in the local domain, the clitic construal with *si* works as the least marked option, and as a matter of fact precisely this construal is used to express local theta-identification structures such as inherent reflexives or inalienable possession.<sup>23</sup> In the non-local domain, the clitic construal is not available, and the LDA is used as a spell out of the unsaturated position. The mechanism of theta-identification cannot give rise, by its very nature, to the near-reflexive reading, which is therefore systematically and consistently ruled out across languages, in particular, both in Italian and Chinese.

On the other hand, a lexical formative takes a *syntactic* antecedent, according to (whatever version of) the binding theory. Therefore, provided a suitable scenario, the near-reflexive reading might be available.

Finally, when locally bound, *proprio* can work as a near-reflexive, given that in the local domain a still less marked option – the *si*, or *zero* option – would be available, to be used in the implicit anaphora construals. Therefore, again in a model such as the one developed by Safir (2004a; 2004b), *proprio* is not the item selected for the Numeration, given that a more economical realization can be provided., *Sé* can only be the spell out of an unsaturated position, given that the clitic *si* would not be available as a possible realization of the argument, as often noticed in the literature on Romance clitics.

Let me briefly consider inalienable possession structures – cf. exx. (20)-(25). Let's assume that, minimally, they must be conceived of as consisting of a *part-of* predicates, with two argumental positions: X *PART-OF* Y. The mentioned body part saturates the first argument, whereas the second is saturated through theta-identification with the syntactically local possessor. It can be argued therefore, that in these cases a structure similar to the one of secondary predication is instantiated. Without entering in the details, it seems to me that this idea could be easily worked out to obtain a fairly good empirical coverage of the Romance cases.

This explanation can be extended to Chinese as well. *Prima facie* evidence goes in the expected direction, given that inalienable possession seems to be expressed by means of *zero* anaphora, similarly to the Italian cases. In this sense, therefore, *ziji* would not be the least marked anaphor in the local domain in Chinese and therefore the distribution of the interpretive properties of the anaphors is expected to be the same in the two languages.<sup>24</sup>

### 3. Long Distance Anaphors and the first-personal (*de se*) reading

There is another set of considerations which points to the same conclusions, having to do with the observation, originally due to Chierchia (1989), that LDAs require a *de se* interpretation, following the analysis provided by Lewis (1979). In these pages I'll adopt the term *first-personal* to refer to the phenomenon, following Higginbotham (2003).

Let me summarize some points which might be relevant here, keeping in mind, however, that I'm not going to address the complex topic of *de se* readings and its philosophical/ cognitive/ linguistic import, but only those aspects directly pertaining to LDAs.

Let me illustrate first the famous scenario discussed by Castañeda (1966):

(31) John thinks that he is a war hero

The speaker might mean that John has a *de re* belief about a certain person which is John himself – namely, that that person is a war hero.

However, there are two distinct thoughts that might be in John's mind, both of which can be appropriately reported by means of (31). According to the Castañeda scenario, John might be amnesiac and therefore, when reading about himself, he might say, "Oh, this guy is a war hero!" without realizing that the hero is him himself. The speaker might then report what he said by means of sentence (31). Notice that the speaker knows perfectly well the identity of the war hero, and that therefore *from the speaker's point of view* coreference between the pronoun and the matrix subject is perfectly appropriate. In another scenario, John might simply have a conscious belief about himself: "I'm a war hero", which the speaker might report by means of (31). This one is the *de se* – or first-personal – reading.

In other cases there is no ambiguity, for instance if the sentence contains an emphatic pronoun:

(32) John thinks that he himself is a war hero

The only appropriate reading is the one in which John is perfectly aware of his own identity. The same is true of the reflexive pronoun and of the unexpressed subject of infinitivals, as in the following sentences:

(33) John expects himself to win

(34) John expects to win

In other words, pronouns can have both readings, but not emphatic pronouns, reflexives and the null subject of infinitivals, PRO, as argued in the extensive discussion provided by Higginbotham (2003).

Chierchia (1989) observed that *proprio* exhibits the same property as PRO. Chierchia provides an example in Italian, modeled on the one originally discussed by Kaplan (1979-reported in the references as Kaplan 1989). Consider the following examples, similar to those discussed by Kaplan and Chierchia:

(35) John believes that his pants are on fire

(36) Gianni<sub>i</sub> pensa che i propri<sub>i</sub> pantaloni siano in fiamme  
Gianni thinks that self's pants are on fire

- (37) Gianni<sub>i</sub> pensa che i suoi<sub>i</sub> pantaloni siano in fiamme  
Gianni thinks that his pants are on fire

The relevant meaning of (35) is the one in which the pronoun refers to John. Example (35) contrasts with the Italian one in (36) and is parallel to (37). Example (35) can be interpreted both as a first-personal sentence, or as a sentence which does not imply a reflexive thought by the subject. Namely, (35) can be appropriate also in a situation in which John is not aware of the fact that the person whose pants are on fire is he himself. The Italian equivalent containing a pronoun, in (37), has the same property. However, the sentence containing the LDA is not ambiguous. The example (36) is only first-personal.<sup>25</sup>

There is another piece of evidence which might be interesting in connection with this discussion. For some speakers – even if not for everybody – there is no contrast between the sentences (38) and (39):

- (38) La sventurata fanciulla riteneva che il proprio fidanzato fosse un gentiluomo  
The unhappy young woman believed that self's sweetheart was a gentleman  
(39) La sventurata fanciulla riteneva che il proprio assassino fosse un gentiluomo  
The unhappy young woman believed that self's murderer was a gentleman

Only (38) can be truly first personal – because the young woman in order to have a *de se* notion of her murder should be dead. Some speakers reject (39, but other ones, myself included, do not. However, sentences (38) and (39) both sharply contrast, for all speakers, with (40):

- (40) \*Ho informato la sventurata fanciulla<sub>i</sub> che il proprio<sub>i</sub> fidanzato non era un gentiluomo  
I informed the unhappy young woman that self's sweetheart was not a gentleman

Even the speakers who tend to reject (39) find (40) much worse. In other words, subject orientation is a much stronger and generalized requirement for LDAs than the first-personal interpretation. The generalization, therefore, could be stated as follows: *when possible*, the LDA *proprio* is unambiguously interpreted first-personally.<sup>26</sup>

This reasoning also implies, importantly, that it is *not* the case that anaphors are all and always *de se*. The *de se* reading is a relation between a holder of a propositional attitude – a *believer*, usually realized as the syntactic subject of the main clause – and a proposition, usually syntactically realized as an embedded clause. For this reason, it typically obtains when an anaphor, or a pronoun, in an embedded context refers to the subject of the superordinate one. In main clauses anaphors appear independently of the existence of such a relation. Consider for instance the following example:

- (41) Gianni ha fatto a se stesso il peggior dispetto immaginabile: ha deciso di diventare un linguista!  
Gianni played to himself the worst thinkable trick: he decided to become a linguist!

Sentence (41) expresses an evaluation of the speaker and not a belief by the subject, even if it could still be interpretable, under peculiar conditions, as corresponding *also* to a belief of *Gianni*. For instance, in the following case: “Gianni is a masochist, he deliberately etc etc”.

Moreover, it would be odd to suggest that clause bound anaphors are *de se*, being in general not even obligatorily subject-oriented. Consider for instance the following examples:

- (42) Una lunga terapia psicoanalitica ha restituito Maria a se stessa  
A long psychoanalytic therapy brought Maria back to herself
- (43) Una lunga terapia psicoanalitica ha restituito Maria alla propria famiglia  
A long psychoanalytic therapy brought Maria back to her own family

In these cases, the anaphor is clause bound – *se stessa* (herself) only has this option – and is not subject-oriented, consequently there is no way in which the anaphor can be said to be *first-personal*. Interestingly, the obligatoriness of the first-personal reading seems to pattern very much alike the impossibility of the near-reflexive reading I just illustrated above. It seems to be a property of LDAs holding cross-linguistically – for instance, Huang and Liu (2001) discuss it in connection to LD *ziji* in Chinese. Moreover, in the local domain, there is no possibility for a first-personal interpretation to arise, and yet, as I discussed above, both *proprio* and *ziji* can be locally bound. Finally, as discussed by Higginbotham (2003), it is a property of obligatory subject control structures, analogous to the ones I discussed above in connection to the implicit anaphora facts.

I want to argue that these similarities are not coincidences, and that the same explanation I provided above to account for the impossibility of near-reflexivity, holds here. Again, I do not mean to extend the analysis to control structures as well, given that it would imply an analysis of many complex phenomena, which are not directly relevant to the characterization of LDAs, and which might not be immediately amenable to such an analysis. Therefore, I do not argue here in favor of the idea that *all* items having only the first-personal reading – including PRO – are unsaturated position, to be treated as implicit anaphora, even if upon further scrutiny this line could turn out to be worth pursuing.<sup>27</sup>

The weaker claim I'm arguing for here is that an unsaturated item, saturated by means of theta-identification, *is* (the same thing as) its antecedent. It is neither *bound* by the antecedent, nor *coreferent* with it. Implicit anaphora cases could *never* have a non first-personal reading, whatever the representation assigned to first-personal pronouns might be.

According to this perspective, a LDA has a first-personal reading, exactly as it has a pure-reflexive interpretation, given that it cannot be in any way *different* from the antecedent.

There is an *a priori* even stronger claim – namely, that *all* instances of pure-reflexivity as well as *all* instances of first-personal interpretation must be unified and treated in the same way. With respect to the first- personal interpretation this move would imply that even pronouns when interpreted *de se* must be considered implicit anaphors. This claim is clearly too strong, given the obvious differences between pronouns and anaphors. Concluding, the implication holds only in one way: implicit anaphora  $\square$  first-personal interpretation, but not (necessarily) in the other direction, analogously to what we saw above for pure-reflexivity. I'll consider some issues related to this topic in the next section.

#### 4. LD anaphors and the bound/referential distinction

It is widely assumed that pronouns are interpreted either as referring expressions, or as bound variables. A clear instantiation of a bound variable obtains when the pronoun is bound by a quantifier:

- (44) Every soldier thinks that he is a hero

The point crucial for the present discussion is that the example in (38) is still amenable to two different interpretations – namely, the first-personal and the non-first-personal one. In other words, the presence of a bound variable does not disambiguate between the two readings, which are both available, if the right context is provided.

The presence of an anaphor such as *proprio* is compatible with a quantified antecedent. However, as discussed above, it is unambiguously first-personal, contrasting with the pronoun:

- (45) Ogni ragazzo<sub>i</sub> pensa che i propri<sub>i</sub> pantaloni siano in fiamme

Every boy thinks that self's pants are on fire

- (46) Ogni ragazzo<sub>i</sub> pensa che i suoi<sub>i</sub> pantaloni siano in fiamme

Every boy thinks that his pants are on fire

The fact that the first-personal interpretation of the pronoun can, but obviously does not have to, co-occur with a quantified binder has already been discussed in the literature – cf. among the others, Chierchia (1989), Tancredi (1997) and Higginbotham (2003).

Analogously, it is possible to have quantified sentences instantiating near-reflexive anaphors, such as in the following case:

- (47) Every visitor admired himself.

'Every visitor admired himself (the actual person / the statue of himself)'

The anaphor *himself* in example (44) can be either interpreted as a pure-reflexive, or as a near-reflexive. Coherently, if a sentence contains a pronoun, it can be simultaneously bound by a quantified expression *and* interpreted as referring to the statue:

- (48) Every visitor admired his face

'Every visitor admired his face/ the face of his statue'

However, consistently with the above discussion, *sé* (self) or the long distance bound *proprio*, are compatible with a quantified antecedent, but unambiguously pure-reflexives – i.e., the statue reading is ruled out:

- (49) Ogni visitatore cadde su di sé

Every visitor fell on self

'Every visitor fell on himself/\*his statue'

- (50) Ogni visitatore temeva che l'illuminazione potesse danneggiare il proprio viso

Every visitor was afraid that the lighting might damage self's face

'Every visitor was afraid that the lighting might damage his/\*his statue's face'

Being bound under c-command is often assimilated tout court to variable binding, and in this sense all the anaphors, being c-commanded by their antecedents, should be considered as bound variables. However, in this way, the lack of ambiguity of some anaphors in certain contexts would go unexplained, in that clearly it could not be reduced to the bound/referential distinction.

Rather, being a bound variable seems to be totally neutral with respect to the possibility of being a near-reflexive or a first-personal item, in that both readings can be provided.

Furthermore, the sloppy reading –as an example of bound variable reading – is available both with the near and the pure-reflexive interpretation, as well as with the first-personal and non-first-personal reading. Consider the following paradigm:

- (51) Gianni crede che i suoi pantaloni siano in fiamme, e anche Mario  
Gianni believes that his pants are on fire, and Mario as well  
(52) Gianni crede che i propri pantaloni siano in fiamme, e anche Mario  
Gianni believes that self's pants are on fire, and Mario as well

The bound reading of (51) – Gianni believes that his (Gianni's) pants are on fire, and Mario believes that his (Mario's) pants are on fire – is well formed both with a first-personal and with a non-first-personal interpretation. Namely, it could either be the case that Gianni and Mario are aware of their being the person themselves, or that they both are not. Coherently with what we saw above, with *proprio* in (52), only the first-personal reading is available.<sup>28</sup>

Consider now the following cases concerning near-reflexivity:

- (53) Ringo ammirò se stesso, ed anche John  
Ringo admired self-same, and John as well  
'Ringo admired himself/ his statue, and John did too'  
(54) Ringo si ammirò, ed anche John  
Ringo self-admired, and John as well  
'Ringo admired himself/\*his statue, and John did too'  
(55) Ringo ammirò il proprio viso, ed anche John  
Ringo admired self's face, and John as well  
'Ringo admired his face/ the face of his statue, and John did too'  
(56) Ringo temeva che la pioggia danneggiasse il proprio viso, ed anche John  
Ringo feared that rain might damage self's face, and John as well  
'Ringo feared that the rain might damage his face/ \*the face of his statue, and John did too'

These examples show that even in the case of near-reflexivity the judgements vary according to the locality of the relation and the anaphor used to fill the position. As I illustrated above, the presence of a bound reading is irrelevant to this effect, and does not preclude by itself near-reflexivity. Near reflexivity in fact is possible with *se stesso* in example (53), but not in (51). Analogously, it is available in (54), but not in (55), as expected, being incompatible with LDAs.<sup>29</sup>

To summarize the results obtained in this section: these data show that the obligatoriness of the first-personal interpretation and of pure-reflexivity cannot be reduced to bound anaphora and that some other device must account for them. The hypothesis I argued for in this paper is able to provide an explanation for these phenomena, exploiting a mechanism – implicit anaphora and theta-identification – independently needed in the grammar.

## Conclusions and suggestions for further research

In this paper I argued in favor of two main points: a) LDAs are the spell out of unsaturated positions, i.e., they are cases of implicit anaphora, saturated by means of theta-identification, and b) the classification of binding phenomena into only two categories, bound and referential, is too coarse to capture the observed variety of facts.<sup>30</sup>

This perspective on LDAs has relevant implications for a general theory of non-local binding. Recall in fact, that it cannot be simply argued that the lack of the near-reflexive interpretation and the obligatoriness of the first-personal reading are intrinsic, lexical, properties of the anaphors in question, as discussed in sections 1.2 and 3. Both *proprio* and *ziji* in fact, exhibit these characteristics only when non-local, and can have the other interpretation when locally bound.

Furthermore, in the case of near-reflexivity, some local dependencies, such as inalienable possession and inherent reflexivity, pattern together with LDAs. Therefore, the hypothesis that the lack of ambiguity is a property of LDAs should also be excluded, because it would not explain the similarities among these structures.

Finally, the observation – consistent in a wide variety of languages – that LDAs are morphologically impoverished items is also captured by the view sketched here. Note also that in this way it is possible to explain why the very local construals lacking the near-reflexive reading, share the morphological deficiency characteristic, originally observed by Burzio (1994), with LDAs.

Some questions arise in connection with this analysis, which deserve further attention. Two in particular seem to me especially interesting. The first one is the following: why is it the case that the unsaturated position is spelled out *tout court*? In other words: given that in some structures, for instance in some inalienable possession – and PRO – configurations, the position in question can be morphologically and phonologically null, why don't we always have a *zero* realization of the unsaturated position? One possible line of investigation seems to me to relate the necessity of a *spell-out* of the unsaturated position as a LDA, to case properties. *Prima facie*, in fact, the positions where the anaphors appear, as opposed for instance to PRO, are case-marked, and for some reason, Case seems to be obligatorily spelled-out. But why this consideration, though intriguing, should be true is still far from obvious to me.<sup>31</sup>

The second question concerns the relation of this proposal with a theory of PRO. As I briefly commented in the text, some control facts seem to be amenable to this analysis, but others are not. In particular, the *partial control* facts studied by Landau (2000) do not seem to be compatible with the view of PRO as a simple unsaturated position. On the other hand, in quite a number of cases, PRO has exactly the same behavior of LDAs. This seems too much of a coincidence to be left unexplained.

A possible solution might be to capitalize on the differences between exhaustive and partial control – following in this Landau (2000) himself – and explore the idea that the two PROs are quite different objects. The cases exhibiting exhaustive control could then be treated along the lines discussed here, as also originally proposed by Higginbotham (1997), whereas a different set of conditions should be formulated for the other cases.

## References:

- Burzio, Luigi. 1991. The Morphological Basis of Anaphora. *Journal of Linguistics* 27: 81-105.
- Burzio, Luigi. 1994. Weak Anaphora, in *Paths toward Universal Grammar: Studies in Honor of Richard Kayne*, ed. Guglielmo Cinque, Jay Koster, Luigi Rizzi, Raffaella

- Zanuttini, 59-84. Washington D.C.: Georgetown Univ. Press.
- Castañeda, Hector-Neri. 1966. "He\*: A Study in the Logic of Self-Consciousness." *Ratio* 8: 130-157.
- Chierchia, Gennaro. 1989. Anaphora and Attitude *de se*, In *Semantics and Contextual Expressions*, ed. Roland Bartsch, Jan Van Benthem, Peter van Emde Bos (Eds.), 1-31. Dordrecht: Foris.
- Cole, Peter, Gabriela Hermon & Li-May Sung. 1990. Principles and Parameters of Long-Distance reflexives. *Linguistic Inquiry* 21:1-22.
- Cole, Peter and Li-May Sung. 1994. Head-movement and Long-Distance Reflexives, *Linguistic Inquiry* 25: 355-406.
- Giorgi, Alessandra. 1983/1984, Toward a Theory of Long Distance Anaphors: a GB Approach, *The Linguistic Review* 3: 307-361.
- Giorgi, Alessandra. 1991. Prepositions, Binding and Theta-marking. In *Long-Distance Anaphora*, ed. Jan Koster and Eric Reuland, 185-208. Cambridge UK: Cambridge University Press
- Giorgi, Alessandra. 2004. Long Distance Anaphors and Temporal Relations, in *Proceedings of West Coast Conference on Formal Linguistics*, 23, 223-236. UC Davis, Davis, CA.
- Giorgi Alessandra. To appear. From Temporal Anchoring to Long Distance Anaphor Binding. *Natural Language and Linguistic Theory*.
- Higginbotham, James. 1997. A Plea for Implicit Anaphora. In *Atomism and Binding*, ed. Hans Bennis, Pierre Pica, Jan Rooryck, 182-203. Dordrecht: Foris Pub.
- Higginbotham, James. 2003. Remembering, Imagining and the First Person, in: A. Barber, *Epistemology of Language*, Oxford University Press, Oxford, pp.496-533.
- Jackendoff, R., 1992, Madame Tussaud Meets the Binding Theory, 10, pp.1-31.
- Huang, C.-T. J. & L. Liu 2001, Logophoricity, Attitudes, and *ziji* at the Interface, in: Cole, P., G. Hermon & C.-T. J. Huang, *Long-Distance Reflexives*, Academic press, New York, pp.141-195.
- Kaplan. D., (1979) 1989, Demonstratives, In J. Almog, J. Perry and H. Wettstein, *Themes from Kaplan*. Oxford University Press, New York .
- Landau, I. 2000, *Elements of Control*, Kluwer, Dordrecht
- Larson, R. & G.Segal, 1995, *Knowledge of Meaning*. The MIT Press, Cambridge MA.
- Lewis, D., 1979, Attitudes *De Dicto* and *De Se*, *Philosophical Review*, 88, pp. 513-543.
- Lidz, J., 2001a, Anti-antilocality, in: P.Cole, G.Hermon, C.-T. J. Huang, *Long Distance Reflexives*, Academic Press, Vol.33, pp.227-254.
- Lidz, J., 2001b, Condition R, *Linguistic Inquiry*, 32, pp.123-140
- Lidz, J., 2001c, The Argument Structure of Verbal Reflexives, *Natural Language and Linguistic Theory*, 19, pp.311-353.
- Liu, C.-S. L., 2003, Pure reflexivity, Pure Identity, Focus and Chinese *ziji-benshen*, in *Journal of East Asian Linguistics*, 12, pp.19-58.
- Pica, P., 1987, On the Nature of the Reflexivization Cycle, in: *Proceedings of NELS 17*, GLSA, Univ. of Mass., Amherst, pp.483-499.
- Reinhart, T. & E. Reuland, 1993, Reflexivity, *Linguistic Inquiry*, 18, pp.445-479.
- Reinhart, T. & E. Reuland, 1991, Anaphors and Logophors: an argument structure perspective, in: J. Koster, E. Reuland, *Long-Distance Anaphora*, CUP, Cambridge UK, pp. 283-321.
- Reuland, E., 2001a, Primitives of Binding, *Linguistic Inquiry*, 32, 3, pp. 439-492.
- Reuland, E., 2001b, Anaphors, Logophors and Binding, in: Cole, P., G. Hermon & C.-T. J.



- Huang, *Long-Distance Reflexives*, Academic Press, New York, pp.343-370.
- Safir, K., 1992, Implied Noncoreference and the Pattern of Anaphora, *Linguistics and Philosophy*, 15, 1, pp.1-51
- Safir, K., 2004a, *The Syntax of Anaphora*, Oxford University Press, Oxford .
- Safir, K., 2004b, *The Syntax of (In)dependence*, MIT Press., Cambridge, MA
- Tancredi, C., 1997, Pronouns and Perspectives, in: H. Bennis, P. Pica, J. Rooryck (Eds.), *Atomism and Binding*, Foris Pub., Dordrecht, pp. 381- 407.
- Vergnaud J.R., M.L. Zubizarreta, 1992, The Definite Determiner and the Inalienable Constructions in French and in English, *Linguistic Inquiry*, 23, pp. 595-652.
- Williams, E., 1994, *Thematic Structure in Syntax*, MIT Press, Cambridge, MA.

#### **AUTHOR'S ADDRESS:**

Alessandra Giorgi  
 Dept. of Linguistics  
 Ca' Bembo, Dorsoduro 1075  
 30123, Venezia, Italy

e-mail: giorgi@unive.it

---

□ I would like to thank Jim Higginbotham, Denis Delfitto, Tim Stowell and Guglielmo

Cinque for suggestions and comments on many of the topics discussed in this paper. Special thanks to the reviewers for their very useful insights.

<sup>1</sup> Let me clarify at the very beginning that, given these premises, this proposal does not address any of the issues related to the *binding* of LDAs, such as subject-orientation, the relevance of the verbal mood, the blocking effect of Chinese, etc. On the other hand, it is intuitively obvious that the interpretive and the binding aspects are deeply interrelated and that the two facets of the problem can only artificially be kept separated from each other. Since it is impossible, however, to address both questions in this work, I'll refer the reader to Giorgi (2004a; 2004b) where I address the binding issues, incorporating the view about the interpretation and the nature of the anaphors sketched here. Let me simply point out here that LDAs are subject to specific binding principles of their own, which are not reducible to principle A of the Binding Theory, as widely assumed in the copious literature on the topic.

---

<sup>2</sup> The literature on the topic is very rich and I can't try to render justice in this paper to all the scholars who studied the subject. See, among the others, Anagnostopoulou & Everaert (1999), Burzio (1991), Cole, Hermon & Sung (1990), Cole & Sung (1994), Pica, (1987), Reinhart & Reuland (1991, 1993), Reuland (2001a, 2001b), Safir (1992, 2003a, 2003b).

<sup>3</sup> Technically, the term first-personal is not exactly synonymous of *de se*. For the purposes of this paper, however, we can use the one or the other indifferently. We refer the reader to Higginbotham (2003) for further details on these notions.

<sup>4</sup> Notice also that, on the contrary, the amount of morphological information associated to the various anaphoric items does vary cross-linguistically. For instance, in Chinese, as I said above, the LDA *ziji*, does not have any feature, whereas, in Italian, the LDA *proprio* is marked as 3<sup>rd</sup> person.

<sup>5</sup> Burzio (1994) actually assigns a '?' to the statue reading of (4) and a '??' to the statue reading of (5). To my ear, however, the contrast is quite sharp, and can be considered as 'good' vs. 'ungrammatical'. Notice also that the non-statue reading of these sentences is odd – due to pragmatic implausibility – though not 'ungrammatical'.

Another question relevant in this respect is that in this case there is another structure available, where the reflexive relation is expressed by means of the clitic *si*, plus a preposition:

- i. Gianni *si* cadde addosso
- Gianni *si*-fell on top
- Gianni fell on top of himself

I'll briefly consider clitic construals in section 1.2. below.

---

<sup>6</sup> I will not consider the whole of the distribution of *sé*, because it is complicated by several independent factors which might interfere with the property discussed here. For instance – as discussed in many works on Italian anaphors, cf. among the others Giorgi (1983, 1991) and Burzio (1991) – *sé* (self) can never appear as a direct argument, but it is always embedded in a PP:

- i. Gianni ama se stesso/ \**sé*  
Gianni loves self-same/ \*self
- ii. Gianni parla di ?se stesso/ *sé*  
Gianni talks about ?self-same/ self

However, the question whether *sé* in (5), or in (ii), is a *co-argument* of Gianni will not be addressed here, even if it might be relevant as far as Lidz's analysis goes. For a discussion of the relation between binding and co-argumentality, see Reinhart and Reuland (1993). It must be pointed out that the facts in Dutch, described by Reinhart and Reuland (1993), though in many respects similar to the Italian ones, are not identical and therefore their notions cannot be automatically adopted for an analysis of Italian.

<sup>7</sup> Liu (2003) analyzes the distribution of *ziji-benshen* – glossed by the author as *self-self* – in Chinese. He shows that this item can never have a near-reflexive reading, contrasting with *ziji* and *ta-ziji*. However, the distribution on *ziji-benshen* is even stricter than the one of pure-anaphors, in that additional conditions seem to be at work, inhibiting any spatio-temporal distinctions between the anaphor and the antecedent.

<sup>8</sup> For two phrases to be co-arguments means to be thematically dependent on the same predicate. In this sense, *Gianni* and the locative could be both considered as arguments of *cadere* (to fall). However, it is not totally clear whether the notion of *co-argumentality*

---

should apply to such cases. On one hand, the availability of the anaphor *se stesso* in the same context in principle might point to the conclusion that the subject and the prepositional complement are indeed co-arguments. On the other, it might be argued that locatives, and optional ones as in this case, are in general not real co-arguments of the subject.

<sup>9</sup> See Reinhart & Reuland (1993), Reuland (2001) for a discussion of inherent reflexives with respect to *self* structures.

<sup>10</sup> As I illustrated above, *sé* cannot have a near-reflexive reading, contrasting in this with *proprio*. However, *sé* is never bound by an object, contrary to *proprio*:

- i.      Ho informato Gianni<sub>i</sub> della propria<sub>i</sub> promozione a direttore  
         I informed Gianni of self's promotion to director  
         'I informed Gianni about his promotion to director'
- ii.     Gianni<sub>i</sub> mi ha informato su di sé<sub>i</sub>  
         Gianni informed me on of self  
         'Gianni informed me about himself'
- iii.    \*Ho informato Gianni<sub>i</sub> su di sé<sub>i</sub>  
         I informed Gianni on of self  
         'I informed Gianni about himself'

This pattern might be interpreted as originally proposed in Giorgi (1983), claiming that *proprio* is either a clause bound or a long distance anaphor, whereas *sé* can only follow the long distance binding strategy, hence it is subject oriented even in the local domain.

Descriptively, therefore, given that *sé* always patterns with LDAs, the impossibility of the near-reflexive reading even in the local domain is expected. I'll briefly discuss this question in section 3 below.

---

<sup>11</sup> Note that *proprio* in the pure-reflexive reading is not naturally interpreted as expressing inalienable possession. The generic possessor interpretation, the so-called R-relation, is available, even if odd. The interpretation would be something like: *the face having a relation R with Ringo*, and *the foot having a relation R with him*. The inalienable reading becomes more natural if the possessive is stressed, or contrastively focused:

i. Ringo ammirò il **PROPRIO** viso (non quello di John)

Ringo admired **SELF'S** face (not the one of John)

<sup>12</sup> I thank Audrey Li and Chen-Sheng Luther Liu for judgments and discussion. All misusages of the evidence are exclusively my fault.

<sup>13</sup> As noted in fn. (11), in all the examples with the overt possessive *proprio*, the inalienable reading is marginal, even if not ungrammatical. Again this might be seen as the result of the competition with the inalienable construction:

i. Ringo temeva che i visitatori gli potessero danneggiare il viso

Ringo was afraid that the visitors to him- could damage the face

‘Ringo was afraid that visitors might damage his face’

On inalienable structures in Romance see, among the others, Vergnaud & Zubizarreta (1992). As in the preceding examples, in (24) the non-inalienable interpretation, where the object is in a generic R-relation with the possessor, is admitted, though perhaps pragmatically disfavored.

<sup>14</sup> Recall that *sé* never allows the near-reflexive reading. This is important in the light of the generalization and the theoretical account I’m going to sketch below. It can be said in fact – see Giorgi (1983, 1991) – that *sé* is always and only a LDA, being subject oriented even in the local context.

---

<sup>15</sup> A minimal pair which seems to me to specifically illustrate this point might be the following one:

- i. Gianni si guarda allo specchio  
Gianni si-watches in the mirror
- ii. Gianni guarda se stesso allo specchio  
Gianni watches same-self in the mirror  
'Gianni watches himself in the mirror'

The intuition concerning sentence (ii) is that in this case Gianni is considering his image in the mirror 'objectively' and 'dispassionately', as if considering another person, whereas in (i) he is simply involved in a reflexive activity.

<sup>16</sup> Among the most recent literature on the topic see Hornstein (1999) and Landau (2000).

<sup>17</sup> The analysis in Higginbotham (1997) is mostly devoted to nominal cases such as *self-starting motor*. A reviewer points out that these nominals do not allow LD binding, as in the following case:

- ii. John bought a self-starting motor

Where *self* cannot be John. The reviewer correctly remarks that the analysis of these cases would be relevant to the present hypothesis. However, I'm not able to pursue it here given that the discussion of noun compounds would raise problems that cannot be handled in this paper. I fully agree that as a topic for further research this one would be presumably the most important to be addressed.

<sup>18</sup> See also the discussion of Lidz's observations (2001a) in the subsequent issue of *Linguistic Inquiry*, in the appendix of an article by Reuland (2001). That discussion however, was mostly devoted to the analysis of coordinated structures.

---

<sup>19</sup> I thank a reviewer for pointing out this question. I further discuss the issues related to LD binding in Giorgi (2004a and 2004b).

<sup>20</sup> One can think of a *linguistic formative* as a leaf in the syntactic tree, comprehending therefore both lexical items and empty categories.

<sup>21</sup> As pointed out by one of the reviewers, theta-identification can be roughly speaking defined as a form of strict identity. In all other cases, when theta-identification is not the relevant mechanism, there is no ban against a non-strict identity interpretation. See also Giorgi (2004a, 2004b) for an analysis of the subject orientation of LDAs along these lines.

<sup>22</sup> A reviewer asks whether in Safir's system this would imply a look-ahead strategy. No look ahead is required, given that the selection of the item would require only a strictly local economy principle. See Safir (2004a and 2004b) for discussion.

<sup>23</sup> It could be argued that *si* is not a reflexive clitic at all and that all these local cases are instantiating a *zero* anaphor. Consider also that not all cases of inalienable possession involve a clitic:

- i. Gianni ha sbattuto la testa  
Gianni hit the head  
'Gianni hit his head'

Moreover, also the cases of secondary predications are cases of *zero anaphora*. The considerations given in the texts should be extended to these cases as well, even if I'm not able here to provide an account predicting the appearance of the clitic.

<sup>24</sup> However, subtle native judgments are necessary to this end and I leave the question open for further studies on Chinese. Furthermore, I do not consider here the properties of Dutch *zich*. The reason is that this item conflates both the functions of the Italian/Romance *si* –

---

being used in the inherent reflexive construals – and at least some of the functions of the Italian *sé* (self), which is a subject oriented anaphor. The first issue therefore, should be to explain how this is possible, and why. Moreover, the picture is made even more complex by the fact the *zich zelf* in Dutch – as to a certain extent *se stesso* in Italian – seems to be also interpretable as an emphatic for *zich*. Finally, in order to have a clearer picture of this language, the presence, or absence, of *zero* anaphors should also be investigated. I'll leave the question open for further study.

<sup>25</sup> Chierchia (1989) attributes this fact to inherent properties of the anaphor. My point here is that it is not the case that the property involved is a lexical one, given that in other contexts *proprio* is acceptable without a first-personal reading. Consider for instance the cases in which *proprio* refers to an object, as in the example (i) in fn. 10. Note that Chierchia's hypothesis might be considered an explanation for subject orientation, as an alternative therefore to other possible theories of subject orientation, such as the logophor theory. I discuss these options in another work (Giorgi 2004).

<sup>26</sup>

Note also, in connection to the examples in (38)-(40), that for some speakers, if it is not possible to assign it the first-personal interpretation, the sentence becomes marginal, for other ones, it is still possible. These judgments are in line with the hypothesis developed in the text. In other words, since according to my proposal the first personal interpretation is not a lexical property of LDAs, there is no incompatibility between non-first personal contexts and LDAs.

For the speakers who tend to reject (ii), one could claim that this is due to the fact that, as argued by Safir (2004a; 2004b), the various items tend to *specialize* in a given language.



---

Therefore, implicit anaphora could be disfavored when selecting the Numeration to express the meaning in (ii), given that it might be considered as specialized for first-personal sentences. Notice in fact that even in (i) there is no complementary distribution between the anaphor and the pronoun:

- i. La sventurata fanciulla<sub>i</sub> riteneva che il suo<sub>i</sub> fidanzato fosse un gentiluomo

The unhappy young woman thought that her sweetheart was a gentleman

In other words, even if not ruled out by any principle of grammar, speakers might regard the various items as more or less appropriate to the corresponding contexts.

<sup>27</sup> The cases of *partial control* discussed by Landau (2000), together with the consideration that PRO can have split antecedents, might suggest that some pronominal-like properties are involved in the characterization of PRO.

<sup>28</sup> With respect to example (51), it can certainly be the case that both conjuncts are interpreted first-personally. The interpretation relevant to my argument, however, is that in which they are *not* interpreted first-personally. This interpretation seems to be well-formed in English as well, according to native speaker judgments. I don't address here the question concerning the possibility of *mixed* readings, in which only one of the conjuncts is interpreted first-personally. Note finally, that the non-bound reading of (51), in which the pants in questions are always Gianni's, can straightforwardly be first-personal. With respect to (52), it seems to me that the bound reading is by far the favorite one.

<sup>29</sup> *Only* clauses seem to me to go in the same direction. The presence of the anaphor *proprio* forces the bound reading in all cases. However, the statue reading is perfectly well-formed, in the local context and disallowed in the long distance one:

- 
- i. Solo Ringo ha ammirato il proprio viso  
Only Ringo admired self's face  
'Only Ringo admired (?) his face/ the face of his statue'
- ii. Solo Ringo teme che la pioggia danneggi il proprio viso  
Only Ringo fears that the rain might damage self's face  
'Only Ringo fears that the rain might damage (?) his face/ \*the face of his statue'

Recall, as I discussed above, that the non-inalienable interpretation might be odd in these cases, but is certainly available.

<sup>30</sup> See Giorgi (2004a, 2004b), where the question is considered both with respect to Italian and with respect to Chinese. The idea I implement in these works – based on the notion of *Interpreted Logical Form*, developed by Larson and Segal (1995) – is that the unsaturated position percolates the structure and is theta-identified locally with the *bearer of the attitude*, which is represented in the morphosyntactic tree. In most of the cases, the bearer of the attitude is the superordinate subject, but a detailed discussion is devoted to precisely those cases in which a non-subject is available for antecedenthood, or a 'discourse' antecedent seems to be picked up for reference. The whole question is however too complex to be effectively summarized here. Let me only stress that this view offers an alternative perspective to the idea that long distance anaphors move covertly to their antecedent, overcoming some of the problems noticed in the literature in this respect.

<sup>31</sup> As noted by a reviewer, the issue is complicated by the fact that in Chinese there is an extensive usage of *zero* items in Case positions. However, such zero elements in Chinese, analogously to the Italian *pro*, are pronominals. The issue therefore, seems to be orthogonal to the one considered here. The question in fact could be formulated as follows: what

---

licenses a *zero* pronominal in Chinese? Note that, whatever the answer to this question might be, the generalization that neither in Italian nor in Chinese is a LDA realized as a *zero* still holds.