

Left and Right Dislocations: Discourse functions and anaphora

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Abstract

This paper presents an account of the anaphoricity evident in Left and Right Dislocations in terms of discourse, rather than sentence anaphora. The constraints on the distribution of the various referring expressions are claimed to derive from the discourse functions of the constructions in question in conjunction with the differential capacity of the distinct referring expressions to access and activate the relevant discourse entities. The various discourse functions of Left and Right Dislocations as discourse organizers are discussed and the nature of their interaction with the retrievability potential of the different referring expressions in these constructions is presented. The correct distributional predictions with respect to the anaphoricity in question are made.

1. Introduction

The awareness that the correlation between linguistic form and discourse function is to be conceived of as part of our linguistic competence is gradually gaining ground, even among linguists who were only concerned with morpho-syntactic sentence-level phenomena previously. Likewise, it is becoming increasingly clear that discourse considerations may have to be taken into account when providing an appropriate syntactic characterization in certain instances, if only to exclude grammatically well-formed but functionally infelicitous utterances from the set of grammatically ill-formed sentences. In this paper I will discuss two instances of a form–function correlation in an attempt to provide an account of a particular distributional property of certain referring expressions in discourse functional terms. Specifically, the discourse functions of Left Dislocations and Right Dislocations will be investigated. It will be argued that an insightful account of the anaphoric options available in Left and Right Dislocations would have to consider their discourse functions along with the differential capacity of the various referring expressions evident in them to access and activate the relevant discourse entities. The treatment of these

referring expressions in terms of discourse rather than strictly sentential anaphora would bear on the question of the intricate relationship between sentence and discourse on the one hand, and between morpho-syntactic and pragmatic considerations, on the other.¹

2. Left Dislocation

2.1. Syntactic background

The following constructions constitute examples of Left Dislocations (LDs):

- (1) Jerry_i, he_i's been working here for years.
- (2) Jerry_i, I don't see him_i at all.

LD is characterized by an initial non-vocative NP (NP₁) followed by an expression containing an NP (NP₂) which is coreferential with it.² My concern in the present context is with the anaphoric options evident in LDs. Thus, the distribution of the coreferential expressions in (1) and (2) is to be contrasted with that found in (3) and (4) (following):

- (3) *Him_i, Jerry_i's been working here for years.
- (4) *Him_i, I don't see Jerry_i at all.

Note that the pronominal expressions in all the above sentences are used non-deictically and the question of their distribution is particularly interesting in view of the structural peculiarities of the LD constructions in which they occur. I will not elaborate on these intricate syntactic issues in the present context (but cf. Ziv, ms.) but rather briefly characterize them in an attempt to enhance the appreciation of the validity of the discourse-functional account which I will adopt.

¹ I should like to thank M. Ariel, P. Cole, E. Doron, B. Grosz, G. Hermon, E. Prince, S. Rothstein, J. Taglicht and two anonymous readers for their comments on earlier versions of this paper.

² These are the prototypical instances of LDs. There are, in addition, instances of PP introduced constructions where *as for* or *concerning* precede NP₁, which may count as instances of LD or LD-like constructions with respect to the question of anaphoricity dealt with in the current context. If such constructions are conceived of as LD-like then the occurrence of sentences as in:

(i) As for herring, I don't really like fish.

(ii) As for fish, I don't like herring, but I love salmon.

seems to indicate that the characterization of the relationship between so-called NP₁ and NP₂ is somewhat more complicated, involving set membership of some type. An exact characterization of these relations is beyond the scope here, since I intend to investigate the subset of LDs involving coreferentiality. Yet, Hirschberg's (1985) notion of a partially-ordered set ('poset') with its set, identity, 'part-of' and 'sub-type-of' relations may help specify the correct relationship. Note, incidentally, that a characterization along these lines will treat Chinese so-called 'non-gapped topicalizations', which were conceived of as an atypical instance of topicalization, as particular examples of Left Dislocations. (This comment is due to P. Cole, personal communication.)

Within the rich formal generative framework it has been claimed (Reinhart, 1983, 1986, *inter alia*) that the so-called grammar of anaphora should be exclusively concerned with instances of referring expressions which display logical properties associated with bound variables and that all other instances of anaphoric relations ought to be accounted for pragmatically, where this latter approach was regarded as extra-grammatical. On this view, the grammar of anaphora was conceived of as strictly sentential, and crucial reference was made in its determination to the hierarchical notion of C(onstituent)-Command. The question of the relevant pragmatic characterization of the constraints on anaphora has not been sufficiently worked out.³ The LD constructions under investigation seem not to display the bound variable anaphora and hence, by the proposed generative standards, require a pragmatic account.⁴ In addition, the structural properties of LD point to some problemat�city with respect to its sentential status. Thus, the anaphoricity evident in it is significantly distinct from that which is characteristic of structurally well-formed sentences elsewhere. Witness the distinction between (5), where non-coreference is the preferred interpretation, in line with Chomsky's (1981) condition C of the Government and Binding Theory, and (6), an instance of LD, where for those who find it acceptable the coreferential reading is preferred:

- (5) John said that John / John's mother is smart.
 (6) John, I don't know anybody who likes John a whole lot.

Under the assumption that LD constructions do not constitute sentences, but rather non-sentential discourse segments, the coreferentiality evident in (6) would not constitute a counter-example to Chomsky's condition C.⁵

Additional arguments for the non-sentential status of LDs concern the properties associated with NP₁. NP₁ displays characteristics of an extra-sentential constituent. Thus, it must occur in the left periphery and no preposing of any kind can move material over it. Constructions like (7a), where adverb preposing made NP₁ non-peripheral, are clearly ill-formed, whereas their well-formed counterparts in sen-

³ Interesting initial studies of some pragmatic aspects of anaphora involving point of view are evident in Kuno (1987), Zribi-Hertz (1989) and Reinhart (ms.), where certain Anaphors in so-called 'long-distance' contexts are discussed. A more general cognitive approach to binding conditions can be found in Ariel (1987) and Levinson (1991).

⁴ The following sentences indicate that the pronoun in LDs cannot be interpreted as a bound variable:
 (i) Mary Smith, we are considering voting for her, but
 (a) *her husband, we won't. (=vote for him – bound)
 (b) ?her husband, he insists that we shouldn't. (=vote for her – referential)

Corroborating evidence is also available from instances involving quantified NPs in the position of NP₁ (cf. Ziv, ms.).

⁵ A similar argument could be made on the basis of the difference between the coreferentiality potential in the following:

- (i) Oscar likes him.
 (ii) Oscar, he likes her very much.

Only in the LD construction in (ii) is the initial NP interpreted as coreferential with another NP in the same construction, apparently counterexemplifying condition B of the binding conditions.

tences like (7b) have the preposed adverbial in a position immediately following NP₁, leaving this NP in the left periphery.

(7a) *Last year, Rosa Berkoff, she lost 20 pounds.

(7b) Rosa Berkoff, last year she lost 20 pounds.

The same distributional distinctions are evident in the case of topicalization, as in:

(8a) *Movies, Rosa Berkoff, she can't stand, but books ...

(8b) Rosa Berkoff, movies, she can't stand, but books ...

This fixed position suggests that NP₁ is to be considered outside the sentential domain.⁶ The non-recursive nature of LDs suggests additional distinctions between ordinary sentences and the LD constructions under investigation. Accordingly, LDs may be regarded as instances of non-sentential discourse segments, probably of a processing-relevant nature.⁷ If, indeed, LDs will ultimately be conceived of in non-sentential terms, then clearly sentence grammar will be irrelevant to their analysis, and a discourse-functional approach would have to be adopted to account for the anaphoric options available in them. Irrespective of their ultimate syntactic analysis, however, I will adopt a discourse-functional approach in the present context in an attempt to provide a principled explanation of the various distributional facts concerning the relevant referring expressions.

2.2. A pragmatic account of anaphoricity in LDs

In what follows I will argue that in order to predict the distribution of coreferential expressions in LDs we need to consider two factors: first, the capacity of the different referring expressions evident in LDs to access the relevant discourse entities and second the specific discourse functions of LDs.⁸

2.2.1. Referring expressions and activation of discourse entities

Referring expressions have been studied by philosophers, linguists and psycholinguists in an attempt to determine the exact nature of their functioning in language.

⁶ Supporting evidence for the extra-sentential status of NP₁ could be cited from German, where the generalization concerning Verb Second word order would dictate that the LD construction in (i) count as a non-sentence:

(i) Der Professor, sie lobten ihn.
the professor they praised him

Considering LDs as purely sentential constructions would constitute a blatant violation of the verb second word order generalization. (This argument is due to G. Hermon.)

Additional evidence for the special status of NP₁ could be provided on the basis of its morphosyntactic properties in a variety of unrelated languages. Accordingly, this NP does not show the case-marking which is associated with NP₂, the NP with which it is coreferential in the clause to which it is appended.

⁷ Such a view is also advocated in Keenan and Schieffelin (1976), Verhagen (1979) and Lambrecht (1981). A likely structural unit could be E(xpression) as proposed by Banfield (1973) in a different context.

⁸ The type of treatment advanced here is close in spirit, if not in detail, to Bolinger's (1977).

Presuppositions and contextual considerations were non-controversially claimed to figure prominently in their use and interpretation. The relevant contextual factors and the extent to which these are actually codified linguistically have been the subject of research more recently. Views of linguistically relevant contexts range from more simplistic context–form mappings to more sophisticated models, where external contextual considerations are only indirectly codified (cf. Chafe, 1976; Clark and Haviland, 1977; Clark and Marshall, 1981; Garrod and Sanford, 1982; Givón, 1983; Prince, 1981; *inter alia*). For the purposes of the current analysis I will adopt the Accessibility Marking theory elaborated by Ariel (1990), whereby the linguistic codification does not follow a direct context–form pattern, but rather, what is marked is the status of the entity's retrievability from memory.

According to Accessibility Marking theory, referring expressions differ in their capacity to access different discourse entities. Accessibility of referents, in turn, appears to be a function of a variety of factors ranging from recency of mention through salience and topicality to change of scenery and passage of time within the discourse world. In conjunction with this model several hierarchies have been established rating degrees of accessibility: unstressed pronouns were claimed to occupy a position higher on the accessibility scale than their stressed counterparts and these, in turn, were argued to rate higher on this scale than proper names or definite descriptions. Accordingly, unstressed pronouns designate discourse referents that are highly accessible (characteristically by virtue of having been activated recently), stressed pronouns are used to refer to entities that are less highly accessible (and are dependent on the physical or contextual salience of the referent or its discourse representation), and proper names and definite descriptions designate discourse referents that are least accessible (and could theoretically refer to entities that are not part of the discourse up to the point where reference is established, but rather constitute part of the interlocutors' knowledge of the world).

The differential potential of the distinct referring expressions to access discourse referents will be shown to interact with the discourse function of LDs in ways that will predict the possible distributions of anaphoric expressions in these constructions.

2.2.2 *The discourse functions of LD*

The discourse functions of LD constructions have been studied by several scholars (cf. Duranti and Ochs, 1979; Gundel, 1975; Keenan and Schieffelin, 1976; Prince, 1980, 1984, 1985, and ms., *inter alia*). Despite differences of emphasis and detail, the various studies share a common denominator – they all regard the function of LD as basically introductory; the construction is claimed to either introduce or reintroduce a referent into the discourse that is judged not to be in the foreground of the listener's consciousness (to use Chafe's (1976) conception).

Prince's (1984, 1985, ms.) studies of LD are the most detailed and are backed by strong empirical evidence. She claims LDs are associated with three distinct discourse functions, and raises the question whether this should be regarded as an instance of a true constructional homonymy. Important though this issue is, I will not address it here. Rather, I will present the three functions and show that the dis-

tribution of anaphoric options in LDs is consistent with all these functions in view of the accessibility potential of the different referring expressions.

The discourse functions of LD, accordingly, are: (a) marking an entity (represented by the initial NP) as already evoked in the discourse or else in a set relation to an evoked entity,⁹ (b) simplifying the processing of discourse-new entities by removing them from syntactic positions which are disfavored for discourse-new entities (e.g. subjects and possessives) and creating a separate processing unit for them (i.e. NP₁),¹⁰ and (c) amnestying an island violation, where this function seems therapeutic in that the resulting structure appears to constitute an instance of a Topicalization with a resumptive pronoun occurring in structural configurations in which Topicalizations without the pronoun would be ruled out (i.e. so-called islands cf. (13) and (14) following).

The characterizations of the first two functions evidently point to the organizational nature of LDs in discourse; LDs set the continuation of the discourse in a particular direction, making either a new or an already evoked discourse referent which is not currently salient into a potential topic.^{11,12} Discourse studies indeed reveal that in the relevant discourse segments following the LD construction the entity (re)introduced by LD tends to function as either the subject or the topic, thus corroborating the generalizations concerning the discourse function of LD.

2.2.3. Discourse anaphora and LD

We will consider the three discourse functions of LD separately. The most well-recognized discourse-content organizational function of LD is the (re)introduction of an evoked entity (function (a) above). Accordingly, LD functions to establish characteristically non-salient (=less accessible) entities as potential discourse or segment topics.¹³ Under these circumstances, clearly, referential expressions that designate less accessible referents would most typically be used as NP₁. The counterparts of these referential expressions that rate higher on the scale of accessibility would be counterproductive in this function, since they would mark a relatively inaccessible discourse referent as if it were more highly accessible.¹⁴ Under the assumption that

⁹ The set-inference triggering function of LD designates that the entity represented by the initial NP stands in “a salient partially ordered set relation to some entity or entities already evoked in the discourse model” (Prince, ms.). The nature of partially ordered sets in the present context is presented in Hirschberg (1985) and successfully applied to LDs by Prince (ms.) and to Topicalizations by Ward and Prince (1991). These relations include the usual set membership, identity, ‘part of’, ‘sub-type-of’ *inter alia* (cf. fn. 2).

¹⁰ Once NP₁, the newly created unit, is processed, the entity ceases to be discourse-new and it may occur in its original position as a pronoun.

¹¹ For a relevant characterization of topics in terms of ‘aboutness’ and the distinctions between sentence and discourse topic cf. Reinhart (1981).

¹² These organizational characteristics could be couched within a backward-looking center terminology of the type proposed by Joshi and Weinstein (1981) and Grosz et al. (1983). This has been attempted for LD by Prince (personal communication).

¹³ Salient evoked entities would characteristically be represented by unstressed pronouns in the relevant canonical sentences.

¹⁴ Alternatively, it has been proposed to me (anonymous reader’s comment) that regardless of the actual status of the referent, the expression representing the entity and its position as NP₁ in LD presents conflicting information regarding its accessibility.

the linguistic coding of accessibility is designed and utilized to facilitate the retrieval of the various discourse referents, an erroneous marking in terms of accessibility is likely to impair the retrievability process. Thus, we can predict that unstressed pronouns, which are prototypically associated with highly accessible discourse referents, would not occur in NP₁ position. This is corroborated by the ill-formedness of sentences like (3) and (4) above, repeated here for convenience:

- (3) *Him, Jerry's been working here for years.
 (4) *Him, I don't see Jerry at all.

The LD function would thus be best served if linguistic markers of lower accessibility (in the present context, proper names and definite descriptions) were to fulfil the role of NP₁. This is evident from the well-formedness and the prototypicality of (1) and (2), repeated here:

- (1) Jerry, he's been working here for years.
 (2) Jerry, I don't see him at all.

Interestingly, stressed pronouns, which are intermediate in their designation of accessibility between unstressed pronouns and proper names and definite descriptions, may occur in the position of NP₁ under restricted conditions and then only if NP₂, the NP with which they are coreferential in the clause to which they are appended, is an unstressed pronoun. This is evident from a comparison of the well-formedness of (9) with the relative ill-formedness of (10):

- (9) A: I want to know how John is doing.
 B: Him (stressed), he never studies.¹⁵
 (10) A: I want to know how John is doing.
 B: *Him (stressed), John never studies.

The explanation of this distributional restriction seems to lie again in the scale of accessibility, where the linguistic marker of lower accessibility must precede the one of higher accessibility with which it is coreferential in LDs. This generalization in terms of linear precedence of low accessibility markers over high accessibility markers in LDs seems to make the correct distributional predictions concerning the anaphoric expressions in LDs. The entity referred to by NP₁ has to be retrieved by means of the appropriate referring expression. Once retrieved (by means of NP₁), it cannot be referred to using NP₂ which counterfactually indicates a lower degree of accessibility.

Incidentally, the occurrence of stressed pronouns as NP₁ in LDs such as in (9) above requires some explanation. Note that the referent (represented by *John*) is

¹⁵ Note that the non-nominative case associated with NP₁ in such sentences does not counterexemplify our claim about the lack of relevant case-marking on NP₁ (cf. fn. 6), since this is the only form which such pronouns can assume, irrespective of the grammatical role of NP₂.

apparently immediately accessible, occurring in A's utterance to which B's words constitute a response, in clear violation of the appropriateness conditions on the occurrence of LDs. This state of affairs is especially puzzling in view of the fact that unstressed pronouns used anaphorically in the same position would be ruled out, as is evident from the ill-formedness of (9') following:

- (9') A: I want to know how John is doing.
 B: *Him (unstressed), he never studies.

In fact the non-occurrence of the unstressed pronouns in NP₁ position in LDs is fully predictable, in line with the characterization of the felicity conditions on the use and function of such LDs, as was indicated above. I would like to propose then that stressed pronouns can occur in NP₁ position in LDs (as in (9) above) when they are used 'contrastively' in a sense to be explicated below. Intonationally prominent pronouns are characteristically used either deictically or in so-called 'contrastive' contexts. Since the instances of stressed pronouns occurring as NP₁ in contexts such as in (9) above are clearly not used deictically, they must be used 'contrastively'. Erteschik-Shir and Lappin (1983) propose a discourse-functionally oriented theory of stress where they discuss contrastive stress as denoting 'a restrictively dominant set'. The highlighted entities are singled out from a potentially considerably larger set of relevant entities. In the case at hand then, *him* in (9) retrieves the referent out of a set of other likely candidates to be discussed. If we were to paraphrase it, B's response in (9) could be

- (9'') B: You want to know about him (of all people)?
 Well, he never studies.

This use of the stressed pronoun is clearly in line with the set-inferencing function of LD as in (a) in 2.2.2 above.¹⁶

As for the second discourse function with which LD is associated, namely, the processing unit creation of discourse-new entities (function (b) in 2.2.2 above), it can be shown to make the most efficient, in fact the only possible, utilization of the relevant referential expressions in the manner evident in (1) and (2) above. That is, LDs utilized to introduce discourse-new entities can do so effectively only if NP₁ designates a prototypically inaccessible entity, one that has not been retrieved prior to the given point in the discourse. The relevant referential expressions designating new (=inaccessible) discourse entities are proper nouns and definite descriptions, and these indeed occupy NP₁ position in LDs of this type.¹⁷ Unstressed pronouns would

¹⁶ Incidentally, a sentence like:

(i) John, he never studies.

would seem to be well-formed in precisely the same context as (9) is, despite the immediate prior mention of *John*, since it too constitutes an instance of contrastiveness.

¹⁷ Cf. Prince (ms.) for instances where NP₁ is realized by an indefinite NP in both functions (a) and (b). In the current context, however, I am restricting my attention to the prototypical instances of NP₁,

designate highly accessible entities, that is, entities which have, in fact, been retrieved prior to the current point in the discourse and are still salient in the hearer's attention; as such, these pronouns would not be capable of presenting discourse-new entities, in principle.¹⁸ It follows then that we would never find unstressed pronouns in NP₁ position in LDs fulfilling this discourse function. As for stressed pronouns, as I mentioned in discussing the first discourse function of LD, they could be used contrastively or deictically. Under the first, contrastive, use, they would clearly designate non-new discourse entities (cf. discussion above) in contradiction with the discourse function that the LDs in question fulfil. The second, deictic, use would seem to fall in line with our accessibility hierarchy above, namely, it could only function in NP₁ position to introduce a new entity if NP₂, the expression with which it would co-refer in the same construction, would designate a more accessible discourse entity. The only relevant entity in this category in the present context would be an unstressed pronoun. Deictic expressions would thus function in NP₁ position as introducers of discourse-new entities, the referential information being provided by the circumstances surrounding the speech situation, and they would be functional in introducing the referent to the actual text. Consider, in this context, (11) and (12) uttered when in a discussion of the qualities of a good teacher A and B (the discussants) come across John Smith, A's teacher. B then raises his eyebrows in a non-verbal query, pertaining to Smith's qualifications in this context, while A utters:

(11) Him (stressed), he (unstressed) is a miserable teacher.

(12) *Him (stressed), Smith is a miserable teacher.

It is evident that this distribution of referential expressions too is predicted by the second discourse function of LDs in conjunction with the retrieval properties of the various referring expressions.¹⁹

As for the third, therapeutic function of LDs, amnestying island constraint violations, it can be shown quite trivially that there is in fact no other option but that the referential expressions display the pattern evident above, namely, proper name or definite description in NP₁ position and a coreferential pronoun in NP₂ position. If, as Prince convincingly argues, these LDs basically constitute instances of Topicalizations with resumptive pronouns, then the rationale for the structure is purely syntactic, namely, not to create a syntactically ill-formed construction. Since Topicalizations are outlawed in certain structural configurations, resumptive pronouns

namely, to referring expressions, in an attempt to provide evidence that the restrictions on their distribution in such constructions are predictable. Additional motivation for this restriction in scope comes from the non-occurrence of indefinites as NP₁ in RDs. For more on these cf. Grosz and Ziv (forthcoming).

¹⁸ Cataphoric uses are impossible in this construction due to the particular discourse functions with which LDs are associated. Thus, neither the marking of the NP as already evoked, nor the creation of a separate processing unit could be successfully accomplished, if a cataphoric pronoun were to occur as NP₁. Trivially, no amnestying of any island violation would have been relevant.

¹⁹ Note the impossibility of an LD with both NP₁ and NP₂ stressed in this context. The contrastive reading is inconsistent with the discourse function under consideration and the deictic reading seems to be available only with respect to the initial NP.

would help ‘restore’ grammaticality in these configurations. Compare the ill-formed (13), where Topicalization extracted an element out of a relative clause, in violation of the subjacency restriction, or Ross’s Complex NP Constraint, with the well-formed (14), where a resumptive pronoun occurs in place of the gap in the relative clause. The resulting structure in (14) displays the structural characteristics of LDs:

(13) *My copy of the book, I don’t know who has.

(14) My copy of the book, I don’t know who has it. (adapted from Prince, ms., her (25))

In case the LD in such island instances is in line with the other functions of LD, either (a) or (b) above,²⁰ then the same rationale provided above will hold true of the current cases as well, and will predict the correct distributional pattern of the various referring expressions.

3. Right Dislocation

3.1. Background

The following sentences constitute instances of Right Dislocation (RD):

(15) He_i is here, Jim_i.

(16) I don’t like them_i at all, the cops_i.

RD appears to display structural symmetry with LD, such that where LD opens with NP₁ RD closes with it and in these instances NP₁ is not a vocative. In both RD and LD there is another NP elsewhere in the construction that bears a predictable relationship to NP₁ – it is coreferential with it. Despite this apparent symmetry, however, there is clear syntactic evidence (Ziv, ms.) based on the case with which NP₁ is associated and the formal subjacency sensitivity, indicating that RD is significantly distinct from LD, such that, unlike LD, RD displays sentential characteristics.^{21,22} As such, the anaphoric options available in RD ought, following the accepted generative lore, to be examined as to their bound variable anaphora properties, to see if they abide by the structural restrictions on such anaphoric distributions. The relevant tests (Ziv, ms.) indicate that this is not the case and consequently, in line with the

²⁰ Cf. Prince (1980, 1984 1985, and ms.) for a discussion of the similarities and the differences between Topicalizations and LDs in discourse.

²¹ The relevant subjacency constraint in the case of RD is the so-called ‘Right Roof Constraint’, which concerns the upward-boundedness of rightward movement rules.

²² Lambrecht (1981) recognizes the distinction between LD and RD along the sentential non-sentential axis, as in the present study. Verhagen (1979) argues for a non-sentential status of both. For him they constitute Es, which are discourse interpretation units.

accepted view, the coreferentiality potential that RD displays will have to be accounted for pragmatically.²³

Before we embark on the discourse-pragmatic account of the anaphoric expressions evident in RD, it is important to distinguish these constructions from what might be confused for them, i.e. Afterthoughts.²⁴ Intonationally, RDs constitute a single contour with no pause preceding NP₁. They show a fall plus rise intonation (Quirk et al., 1985: 1417). Afterthoughts, by comparison, are characterized by a distinct pause preceding the final coreferential NP. They clearly display two different intonational units. NP₁, consequently, bears stress in Afterthought constructions. This is clearly not the case in prototypical RDs. The position of NP₁ may also count as a distinguishing property. Thus, in RD, NP₁ must necessarily occur in clause-final position, whereas the corresponding entity in Afterthoughts may be added as a parenthetical in other positions in the sentence as well, as is evident from:

(17) I met him, your brother, I mean, two weeks ago.

The identity of NP₁ may constitute additional evidence for the distinction between these two construction types. Thus, in RD, NP₁ must necessarily show coreferentiality with some NP which precedes it in the clause; however, Afterthoughts may contain corrections of reference, so we might get instances like the following:

(18) I met John yesterday, Bill, I mean.

where no coreference holds. Having established the crucial structural distinction between Afterthoughts and RDs, I will now proceed to characterize the discourse anaphora constraints on the coreferentiality evident in RD. The account I will propose will be in line with the one offered for LDs above.

3.2. A pragmatic account of the anaphoricity in RD

In this section I will present evidence that the constraints on the anaphoric expressions evident in RD derive from the interaction of the discourse functions of RD with the capacities of the various referring expressions to access the relevant discourse entities.

3.2.1. Referring expressions and accessibility

As indicated above (2.2.1), pronouns rate higher on the accessibility scale than proper names or definite descriptions. The discourse referents accessed by unstressed pronouns must be salient, recent, topical or otherwise potentially easily

²³ Speakers' intuitions concerning the possible interpretations of the following sentence:

(i) They gave me a present, each of them.

indicate that only the referential and not the bound variable reading is available (cf. Ziv (ms.) for a discussion).

²⁴ Cf. Geluykens (1987) where RDs are analyzed as Afterthoughts.

retrievable, since the pronominal reference is minimally informative. In instances of unstressed pronouns it is characteristically textual reference that is available. The discourse referents accessed by proper names or definite descriptions, on the other hand, tend to constitute entities that require more information for them to be retrievable. They may thus be part of the interlocutors' general knowledge, which need not constitute an integral part of the discourse at the point where reference is established or, alternatively, they may have been referred to earlier in the discourse at a point which is relatively distant from the current reference point. Providing a more informative referential expression, thus, is functional in the effective retrieval process in those instances.

3.2.2. *The discourse functions of RD*

In trying to characterize the discourse functions of RD it is important to distinguish them from those of Afterthoughts (cf. 3.1). The discourse function of Afterthoughts, by definition, is corrective. The speaker assesses in mid utterance that s/he has made some error of judgement with respect to some aspect of that which s/he wants to communicate. In the present context, the error concerns either the identity or the relative ease of retrievability of the discourse referent in question. The speaker, thus, corrects the referential expression, or supplies information which would help identify the referent. RDs, on the other hand, are significantly distinct. In his studies of RD in French, Lambrecht (1981) supplies a very insightful characterization of the discourse functions of RD. NP₁, which Lambrecht, following Chafe, refers to as 'anti-topic', is claimed to be 'highly presuppositional' and as such to function characteristically in recovering entities which are either 'situationally evoked' (Prince's (1981) terminology) or 'textually evoked' ('linguistically given' to use Ariel's (1985) terminology). A prototypical example which Lambrecht (1981) supplies from non-standard French concerns retrieval of situationally evoked entities. The following sentence constitutes such an instance:

(19) Il est beau, ce tableau! (Lambrecht's (123))

Sentence (19) is appropriate when the picture is in the physical surroundings of the interlocutors, and when the speaker wants to make sure that the addressee will pay the necessary attention to it. Accordingly, RDs seem to constitute instructions to the addressees to search their surroundings for the appropriate situationally evoked entities and to attend to them. Further reference to these entities is thus made possible in the ensuing discourse.²⁵ Careful examination of the occurrence of this construction in languages like Hebrew and English suggests that, in fact, just as Lambrecht observes, textually evoked entities could also be conjured up utilizing this constructional variant. The restriction in these latter cases seems to pertain to the relative dis-

²⁵ The use of RD to introduce into the discourse-text entities that were salient in the discourse situation seems to require some modifications in the existing theories of Discourse Structure and Centering of the type proposed in Grosz et al. (1983) and Grosz and Sidner (1986) along the lines suggested in Grosz and Ziv (forthcoming).

tance of the previous discourse occurrence of the entity in question. Thus, the entity referred to would, most characteristically, not occur in the immediately preceding linguistic context for RD to occur felicitously. The varying degrees of felicitousness of the following sequences support this observation:

- (20) A: Did you see Jack yesterday?
 B: #Yes. He is going to Europe, Jack.
 (# = infelicitous)
- (21) A: I asked you to read this book for today.
 B: I know. I tried to very hard, but I was quite busy. Incidentally, it is much too difficult for me, this book.

It is self-evident that immediately accessible entities are, naturally, candidates for future topicality (cf. the theories of Centering mentioned in fns. 12 and 25, where such insights concerning discourse reference coherence are formalized). Constituting a means to either introduce or reintroduce an evoked entity into the discourse for the purposes of future reference as a potential topic, RD would be counterproductive in contexts like (20), in that it would erroneously suggest that the referential entity in question is not the automatically accessible one, occurring as the immediate antecedent. RDs are, thus, clearly functional as discourse organizers and constitute part of carefully planned speech, and not an incidental feature of careless performance error.²⁶

A fuller appreciation of the discourse function of RD constructions would be possible once the rhetorical alternatives are considered in their stead. Rather than utilizing an RD construction we could, theoretically, try the canonical SVO version with the pronoun referring to some entity in either the discourse situation or in the text. The instances where the entity in question were to be inferred situationally would have to make use of deictic pronouns and the salience of that entity in the discourse situation would have to be evident. This state of affairs appears to differ from the one portrayed for the prototypical use of RD constructions. In addition, the intonational features of the deictic pronominal expression in the SVO alternant may be construed contrastively, diverting the potential discourse topic in ways that the strict use of the relevant RD would not. Consequently, the canonical SVO would be felicitous under distinct contextual circumstances. The other cases where RDs could be used, namely, where the evoked entity occurs in the discourse text, could theoreti-

²⁶ In fact RD may be used with respect to referents in the immediately preceding discourse context when their function is not referential, but rather predicational (where this latter function is severely restricted). Consider:

(i) A: Did you see Jack yesterday?

B: Oh, is he stupid, this teacher of yours.

Note that the reference to Jack in B's response does not fulfil the RD function characterized as discourse-organizational in terms of future topicality, but rather expresses some emotive content with respect to the referent. This function of RD is irrelevant in the case at hand, since we are dealing with the referentiality issue. However, it is discussed in more detail in Grosz and Ziv (forthcoming) in the context of providing a revised centering theory to account for RD constructions.

cally be conveyed by the canonical SVO with an unstressed, non-deictic pronoun, such as in:

(22) He is here.

Such sentences, however, would erroneously imply that the referent is clearly evident from the discourse context. Recall that RDs are used in such cases where the entity in question does not occur in the immediately preceding linguistic context and hence needs to be retrieved and reintroduced. The incompatibility of these two circumstances suggests that the discourse function of RD cannot be fulfilled by the canonical SVO alternants where the referential expression is realized by a pronominal expression. It is also true that the canonical sentences utilizing proper nouns as in:

(23) John Smith is here.

do not make any of the contextual retrievability assumptions associated with the RD under investigation. The low accessibility which they designate erroneously suggests that the entity in question may not have occurred in the context at all, counter to the state of affairs conveyed by RDs. In instances where situationally evoked entities are retrieved, RDs would have the effect of drawing the addressee's attention to the entity in question, as in Lambrecht's example (19). If we were to use a definite description in the canonical SVO in this case, as in

(24) The picture is impressive.

the referent would only be uniquely identified if the addressee already attended to it (due to its situational prominence). The structure as such would not draw his attention to a particular picture. The canonical structure would, thus, clearly not be interchangeable with the RD construction.²⁷

3.3.3. Discourse anaphora and RD

If the organizational function of RD in discourse is to identify and re-introduce a potential topic in cases where the referent is evokable either situationally or linguistically, and if the different referring expressions vary in their retrieving capacity, then the most effective instance of NP₁ would clearly be a referential expression that is maximally informative, such as a proper name or a definite description.

²⁷ Note, incidentally, that despite superficial similarities, LDs cannot be used under the same contextual circumstances as RDs. RDs cannot be used to introduce discourse-new entities which are not situationally evoked, and even in instances of textually inferred entities, the two seem to abide by somewhat distinct set-inferencing constraints. Thus, LD, but not RD, seems appropriate in contexts like the following:

(i) I went on a bus this morning.

LD: The driver, I was afraid he was going to collide into a truck.

RD: *He was drunk, the driver.

Cf. Grosz and Ziv (forthcoming) for some more distinctions between the two.

Unstressed pronouns, which designate highly accessible discourse entities, are minimally informative; they can only make reference to textual information and as such are naturally inapplicable in the cases where the discourse referent in question is evokable or inferred situationally. This state of affairs would predict the ill-formedness of the following distribution of anaphoric expressions:

(25) *The picture is beautiful, it.

The instances of RDs where textually evoked entities are reintroduced such that they could constitute potential discourse topics in the ensuing discourse were seen to be restricted to non-immediate antecedents, namely, NP₁ could, in such cases, only refer to 'relatively distant' discourse entities. The function of NP₁ as a 'reintroducer' in this instance dictates that the most fully informative referential expression be used; any other discourse-dependent referential expression, such as an unstressed pronoun, would be counterproductive, in that it would constitute an instruction to the addressee to scan the preceding text and look for the appropriate antecedent. Since, as we have just noted, the relevant antecedent cannot immediately precede the RD construction, this search mechanism would constitute a hindrance rather than a help in the processing and comprehension of the discourse. Being discourse-organizational in nature, the function of RD could then not be satisfied. Accordingly, the distribution of anaphoric expressions in the RD construction would follow the pattern evident in (15) and (16), namely, NP₁ is realized by a proper name or a definite description.²⁸ The form of NP₂, the coreferential expression in the immediately preceding clause, is also predicted by this discourse-organizational function. In its referential, non-predicational, function (cf. fn. 29) RD cannot utilize a proper name or a definite description as NP₂, for then the resulting structure would contain two such coreferential NPs as in the following:

(26) *John is here, John.

where NP₁ is not a vocative. The redundant referential expression seems not to constitute the desired enhancement in terms of informativity that is characteristic of the distributional pattern of referential expressions in RDs.²⁹

²⁸ Note that in discussing the referential expressions which may function as NP₁ in RD I did not mention stressed pronouns, which differ in their accessibility potential from unstressed pronouns. However, the impossibility of stressed pronouns to occur as NP₁ in RD is independently predictable on the basis of the unstressed nature of any NP₁ in RD. It is Afterthoughts that may have this position stressed, not RDs. This distributional gap in RDs is responsible for the lack of full accessibility hierarchy in this construction, to mirror the one evident in LD.

²⁹ The same generalization would make the right prediction in instances like the following, where only the attributive and not the identity reading is available:

(i) She is Mrs. Landau, this woman.

The unavailable identity reading is predictably ill-formed, on the same grounds that sentences like (26) are. This is more easily perceivable in cases like:

(ii) *He is John, this guy.

where no attributive reading is conceivable.

4. Conclusion

In this paper I have provided an initial characterization of a pragmatic account of the expression of coreferentiality evident in LD and RD constructions. Such distributional constraints have heretofore been characterized in solely syntactic terms, often at the expense of explanatory capacity. The proposed explanation derives the various distributional patterns of the coreferential pronouns from the interaction of the discourse-organizational functions of the constructions in question and the varying capacities of the different referring expressions to retrieve and activate distinct discourse referents. It is hoped that this type of explanation would shed some light on the intricate question of the interaction between sentence form and discourse function.

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