

## **This, *I believe*, is a processing instruction: Discourse Linking via Parentheticals**

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### 1. Introduction.

Parentheticals have long been regarded as entities having a peripheral status in the sentence. No positive definition has, in fact, been provided in the relevant literature; rather, a variety of examples have often been quoted the common denominator of which being the observation that the entities in question lack any grammatical role in the sentential unit and do not partake in syntactic processes affecting the sentence.<sup>1</sup> In some instances only those entities were considered parentheticals which could otherwise be found as main clauses (e.g. Huddleston and Pullum 2002); other treatments allowed for a wider range of entities to come under the general conception of parentheticals (e.g. Taglicht 1984; Ziv 1985; Rouchota 1998). The function of the parentheticals was taken to be semantic or discourse-oriented, as in specifying the particular illocutionary force (“X” Jim suggested, “Y?” John asked, “W” Bill replied), expressing modality and attitude, attributing a point of view (Bill said/thinks) and serving as a speaker-tracking device in larger stretches of discourse. In this paper, I will be concerned with a property related to the linear position occupied by parentheticals, irrespective of their semantic or discourse-oriented characteristics. Like adverbial adjuncts, parentheticals too are not restricted to any one position in the sentence and can occur in a variety of positions. In the case of parentheticals, however, this linear feature was not considered to be criterial save, perhaps, for the expression of the degree of force on some scale of modality.<sup>2</sup> I will demonstrate that when they occupy second position, parentheticals are functional in establishing a link between the entity in initial position and the discourse within which the utterance in question occurs. I will argue that this linking role is made possible through a proper utilization of the intonational properties associated with parentheticals. These help bring about segmentation into distinct tone units, which are correlated with information units. The latter are then processed against the background of the relevant prior context, thus constituting the link in question .

## 2. Second Position Parentheticals

In the following examples the parentheticals occur in surface second position whether the sentence displays an otherwise canonical word order (as in (1)), or not (as in (2) and (3)) :

- (1) A: Could you remind John that there's a meeting this evening?  
B: John, I believe, will not attend the meeting this evening  
(but I might).
- (2) A: Remember there are 2 meetings: one this evening and  
one tomorrow.  
B: This evening, I believe, John will not be able to attend,  
(but tomorrow he might).
- (3) A: Tell John that the demonstration is at 5 p.m. and the meeting at 7.  
B: The demonstration, I believe, John will not be able to take part in,  
(but the meeting, he might).

The constituent immediately preceding the parenthetical in (1)–(3) above, i.e. *John*, *this evening*, and *the demonstration*, respectively, will be argued to constitute a 'link' (in a sense to be defined below) between the utterance at hand and the adjacent discourse segment.

Following Taglicht (1984), I will refer to such initial constituents as Marked Themes. Accordingly, Marked Themes will be instantiated by initial constituents that are detached "from the element or elements with which [they are] contiguous in the unmarked sequence".<sup>3</sup> This is clearly evident in sentences displaying a non-canonical word order in initial position (e.g. the relevant sentences in (2) and (3)), but it is equally applicable in sentences displaying what we would normally associate with a canonical order where the subject is separated off from the constituent that would have followed it in the unmarked, canonical structure. The subject *John* in the relevant sentence in (1) above (repeated here for convenience):

- (1') John, I believe, will not attend the meeting this evening.

is thus an instance of a marked theme (MT). The parenthetical *I believe* in such cases constitutes what Taglicht refers to as a “partition”, the entity by means of which the marked theme is detached.<sup>4</sup>

Rephrasing the main claim concerning the discourse linking function of parentheticals then, I will demonstrate that when parentheticals function as partitions they render the MT the status of a link between the utterance in which it occurs and the discourse in which that utterance is embedded. This discourse linking function will be shown to be carried out irrespective of the semantics or discourse-illocutionary functions of the parenthetical in question, but solely on the basis of its linear position and the intonational and segmentational properties that are associated with it.

It is self-evident that a discussion of the linking function at hand is only possible once the relevant building blocks of some theory of information structure have been made explicit. This is precisely the subject matter of the next section.

### 3. Information Structure : The Link

Theories of information structure abound. They range from ones that offer overall models to ones that concentrate on linguistic codifications of certain aspects of information update<sup>5</sup>. In the present context, I will only make use of those theoretical constructs which are required for the exposition of the linking function of the parentheticals under investigation and will take no stand on the question of what an all embracing theory should look like.

I will adopt certain aspects of Birner and Ward's (1998) notion whereby **Link** is defined as “the linguistic material representing information which stands in a contextually licensed poset (partially ordered set) relation with information evoked in or inferrable from the prior context, and serves as a point of connection between the information presented in the current utterance and the prior context.” (Birner and Ward, 1998:20)<sup>6</sup> It is noteworthy that this conception of link is mostly discourse-textually oriented and it makes no explicit attempt to relate link directly to any specific cognitive or processing theory. Reference is made to “linguistic material” and to information represented by it, such that a conception of chaining in

textual discourse is explicit and the potential implications with respect to ease of processing are not mentioned.<sup>7</sup> Vallduví's (1992) model of the structuring of information reveals a strong and explicit processing-type approach. Accordingly, he introduces a concept of Link as that part of the Ground (non-focus) whose function is the placement of the focal information in the appropriate mental (memory store) address, so-to-speak.<sup>8</sup>

In addition to the basic concept of link just discussed and in conjunction with it, the need arises for an exposition of the notion of information units. Here too we will restrict our attention to those aspects which are directly relevant to the discussion at hand. Attempts have often been made to relate information units and intonation units (see for example Halliday, 1967-8). Though there is no isomorphism between the two, there nevertheless seems to be some non-accidental co-occurrence, whereby distinct intonational segments are non-trivially associated with units of information. The nature and function of these information units vary. In the present context, the relevant units of segmentation, partially indicated by intonational units, constitute processing units, segments by the help of which information may be updated. It appears then that in the case at hand, some non-trivial correlation between intonation and information units is evident.

Having presented these basic notions we can now proceed with the exposition of the discourse linking function. The major claim then is that far from being merely in free variation, the position which parentheticals occupy in the sentence and the consequent intonational properties, whereby the (de-accentuated) parenthetical occurs as the tail of the immediately preceding constituent, are utilized in segmenting or obviating the existing segmentation into separate tone units. The utilization of this particular intonational phrasing may be conceived of as a processing instruction by which the initial information unit is to be linked to and processed against the background of the preceding text or inferences based on it.

#### 4. Data and Predictions

A reexamination of the set of sentences (1)–(3) above (repeated here for convenience), where parentheticals occur in second position, reveals that the notion 'link' indeed captures the nature of the relation between the MT and the context in

which the sentence at hand is located. Consider the sentences again:

- (1) A: Could you remind John that there's a meeting this evening?  
B: John, I believe, will not attend the meeting this evening  
(but I might).
- (2) A: Remember there are 2 meetings: one this evening  
and one tomorrow.  
B: This evening, I believe, John will not be able to attend,  
(but tomorrow he might).
- (3) A: Tell John that the demonstration is at 5 p.m. and the meeting at 7.  
B: The demonstration, I believe, John will not be able to take part in,  
(but the meeting, he might).

*John*, *this evening*, and *the demonstration*, the MTs in their respective sentences, are separated off by the following parenthetical and are linked to the explicit mention of the corresponding information evoked in the utterance immediately preceding them.<sup>9</sup>

The position-sensitive generalization concerning the linking function of parentheticals has been claimed to be operative irrespective of their particular discourse-semantic content. If, in fact, the linking function evident in the case of 2<sup>nd</sup> position parentheticals is not related to their semantics, but rather to their position and their intonational properties, the prediction would be that non-parentheticals which have similar positional and intonational effects may demonstrate the same linking function, perhaps in addition to their unique discourse-semantic role. And, indeed, this seems to be the case. As evidence consider the similarity between the processing of the MT in (1)–(3) (above) and that of their counterparts in the following (4)–(6) (with *however*) and (7)–(8) with the intensive reflexive:

- (4) Everybody in the office intends to be there this week.  
John, however, will not be able to attend the meeting this evening.
- (5) A: Remember there are two meetings: this evening and tomorrow.  
B: Tomorrow John will make it to all his meetings;

this evening, however, John will not be able to attend.

- (6) The farmers' meeting the minister is sure to attend;  
the students' demonstration, however, he may not be able to get to.
- (7) John asked all of his friends to attend the meeting.  
John himself, will not attend the meeting, unfortunately.
- (8) Before the demonstration the dean wants to hold an important  
meeting with a number of students.  
The demonstration itself will start much later.

Interestingly, in addition to their particular semantic contributions, both *however* and the intensive reflexive show the same type of linking to the context evident in the case of the second position parentheticals. Second position *however*, links the constituent immediately preceding it to an appropriate contextually derived element, by establishing a relevant comparison set of which 'contrast' may constitute a proper instantiation. Likewise, headbound intensive reflexives which, following the subject, occur in second position in SVO are construed as instructions to pick a proper entity from a likely contextually determined set and interpret the subject with respect to it along some scale of comparison.<sup>10</sup>

The following attested examples with the parenthetical in second position demonstrate the linking with the contextually derived entity very clearly.

- (9) Keith told USA Today :”I find it interesting that Jennings is not from the US. I bet Dan Rather’d let me do it on his special.” ABC said it held initial discussions with Keith, but due to scheduling conflicts decided against him. Jennings, it said, had no control.  
[ Michele Orecklin *People. Time* , June 24, 2002 P.80.]
- (10) “The theory developed here is that quotations are demonstrations that are component parts of language use. Demonstrations are unlike descriptions in two main ways. They are nonserious rather than

serious actions.... And they depict rather than describe their referents... Quotations, we argue, have all of the properties of demonstrations...

[H.H. Clark and R.J. Gerrig (1990) *Language* 66,4: 764.]

In (9) Keith implicates Jennings in connection with his non-appearance on some ABC show, suggesting that Dan Rather would have let him appear on his show. The network's response takes full responsibility and absolves Jennings from the allegation at hand. The status of the relevant sentence in the report in (9), with the 2<sup>nd</sup> position parenthetical placing *Jennings* in initial position as a MT, is such that *Jennings* is explicitly linked to its textual antecedent—*Jennings* in Keith's first sentence in the quote. Had it not been presented this way, but only as the subject of the embedded sentence without constituting a MT, and hence an explicit link, it would not have been that effective. In (10) quotations and demonstrations are discussed. Quotations are described as a sub-type of demonstrations. The text segment mentions *quotations* and *demonstrations* in that order and then goes on to discuss demonstrations. In the last sentence of this segment we find a 2<sup>nd</sup> position parenthetical rendering *quotations* a MT status and establishing it as a link with the explicit preceding discussion where quotations were mentioned. Once again, the alternative formulation with *quotations* as an embedded subject as in:

(10') We argue that quotations have all the properties of demonstrations..

would not have fared as well in this context, in that it would not have been linked in the same manner to the preceding text segment.

## 5. Distributional Constraints

In the preceding discussion 'link' has been conceived of as the linguistic material representing information which stands in some contextually licensed relation with information evoked in or inferable from the prior context serving as a point of connection between the information presented in the current utterance and the prior context. This informational characterization makes certain distributional

predictions which appear to be borne out, as is evident from the following environments. The requirement that the MT serve as the informational link between the current utterance and the prior context rules out pleonastic MTs. The ill-formedness of sentences such as (11) and (12) bears this out.

(11) \*It, I believe, will rain tomorrow.

(12) \*There, I assume, are a million theories about word order.

The initial constituent in both these sentences cannot function as an informational link, and hence we cannot find the 2<sup>nd</sup> position parentheticals in them.<sup>11</sup> The restriction on the 2<sup>nd</sup> position as a landing site for the parentheticals following the pleonastic *there* in existential sentences (in (12) above) should be compared with the lack of this restriction once the referential *there* occurs as in (13):

(13) The town nestles at the foot of one of the Siebengebirge, the mythical Drachenfels. There, according to folklore, the Niebelungen hero Siegfried slew the fire drake Fafnir and then bathed in his blood in an effort to become invincible. [“Pilgrimages to the past” Ursula Sautter, *Time*, January 29, 2001]

Indeed the referential *there* can be construed as a link; it ties the utterance in which it occurs to the previous material—the town.

An additional prediction that the 2<sup>nd</sup> position parenthetical creating the link makes is that it would not be able to occur after scene-setting material. This follows naturally, since scene-setting is necessarily informationally scene-initial and thus, cannot stand in any linking type of relation with prior contextual information. The ill-formedness of sentences such as in (14) and (15), where the parentheticals follow prototypical scene-setting constituents, serves as evidence:

(14) \*?Once upon a time, I believe, there was a king. He lived in Africa.

(15) \*?One bright evening, I think, John decided to go for a walk.<sup>12</sup>

Yet another distributional constraint that the linking conception of 2<sup>nd</sup> position

parentheticals makes evident is that which rules out Brand-New unanchored discourse referents (Prince, 1981) from functioning as links. (Recall that Prince distinguishes between anchored and unanchored brand new discourse referents.) The following may corroborate this distributional constraint:

- (16) A: What happened next ?  
B: ???A masked student, I believe, walked in.

Here, as in the case of the scene-setting devices, it is self-evident that initial entities which set the scene and/or are unrelated to any contextual entity cannot become anchorable or linkable to a preceding informational context.

The informational account of the constraint on the 2<sup>nd</sup> position parentheticals may be challenged and a non-informationally-oriented explanation may be attempted. In fact it has been proposed to me (Idan Landau, p.c.) that the constraint on 2<sup>nd</sup> position parentheticals should be formulated as a constraint that is phonologically motivated: only stressable items can occur as MTs. Indeed, this would correctly predict the ill-formedness of the pleonastics as MT's in (11) and (12) (repeated here):

- (11) \*It, I believe, will rain tomorrow.  
(12) \*There, I assume, are a million theories about word order.

However, it would make the wrong predictions with respect to the scene-setting devices and the Brand New Unanchored discourse referents. These are clearly stressable items that can occur sentence initially but cannot be followed by 2<sup>nd</sup> position parentheticals, as is evident from the ill-formedness of (14)–(16) above. It thus appears that a phonologically motivated constraint that does not take any informational consideration into account is not likely to make the correct distributional predictions. To sum up, then, I have shown that far from being simply in free variation, the position that parentheticals occupy in the sentence can be utilized as a processing instruction for the purpose of informational structuring.

When in second position, the parenthetical is used to segment the information unit and is interpreted as a device which helps link the constituent

immediately preceding it to the prior discourse.

## Notes

1 For attempts to provide some syntactic, semantic and discourse functional characterizations of parentheticals within a variety of theoretical frameworks see Urmson (1952), Quirk et al. (1985), Mittwoch (1979), McCawley (1982), Reinhart (1983), Taglicht (1984), Ziv (1985), Hand (1993), Rouchota (1998) and Ruppenhofer (ms.) *inter alia*.

2 See Mittwoch (1979) for an interesting analysis of the difference in illocutionary force between particular instantiations of utterances with final and non-final parentheticals.

3 It is noteworthy that Taglicht's conception of Theme is strictly linear. He is very careful to sever the connections between the formal properties and the informational content.

4 Lexical items such as *however* appear to constitute examples of partitions as well. Note the parallelism between (1) and its counterpart in:

(i) John, however, will not attend the meeting this evening.

This is not surprising in light of various treatments of *however* as a parenthetical. The analysis of the function of the parenthetical in second position as a discourse linking device proposed here is in line with some of the generalizations made by Kuper-Blau (1999) regarding *however* as a processing instruction.

5 For several recent approaches to information packaging see, for example, Vallduví (1992), Lambrecht (1994), Erteschik-Shir (1997) and Birner and Ward (1998).

6 Note that the linking function involves the concept of inferrability on the basis of evoked information. This conception is due to Prince's (1981) reanalysis of 'Givenness' as a scalar rather than a dichotomous notion and its recasting in terms of a scale of familiarity. Information inferred on the basis of other evoked information is thus assigned a non-new status, a familiarity level in between the two ends.

7 This is in line with some of the classical Praguean treatments of Theme-rheme chaining. Approaches to reference determination proposed by centering theory models (e.g. Grosz and Sidner 1986) display the same type of architecture. Accordingly, backward looking centers (Cb) constitute referential links by which Utterance N ( $U_n$ ) is linked to the immediately preceding Utterance N-1 ( $U_{n-1}$ ) and forward looking centers Cf in  $U_n$  constitute potential links to referential entities in  $U_{n+1}$ .

8 Vallduví's conception of **ground** allows for **link** and **tail**; the link constituting the address and the tail the manner of the update. A detailed discussion of this model is clearly beyond the scope here. Erteschik-Shir's (1997) framework shows a similar dynamic processing approach and allows for related theoretical constructs.

9 In fact, there are constraints on the occurrence of such sentences, which have to do with overall comparison and contrast sets, among other considerations. Note that the examples are natural once material is added following *but* in such cases cf. (1)-(3). These considerations, however, are clearly beyond the scope in the present context.

10 What appear at first blush to constitute a range of distinct and fairly specific semantic restrictions characterized in terms of contrast, non-identity, reversal and the like in the case of

*however* (cf. for example Kuper-Blau 1999) and a considerably wider range of functions among which are listed scalar as well as existential implicatures in the case of intensive reflexives (cf. Cohen 1995 and 1999) turn out, upon closer inspection, to share a basic contextually-related characteristic, the comparison with a contextually evoked set with respect to some well-determined parameter.

11 Note also the non-occurrence of *however* in 2<sup>nd</sup> position in these cases.

- (i) \*It, however, will not rain.

This is not surprising in light of the observation concerning the similarities between the two.

(cf. also Kuper-Blau 1999)

12 In view of the non-occurrence of the scene-setting material as a link, the question may be asked as to the nature of the well-formedness of the following:

- (i) Never before, to my mind/to the best of my memory, have so much been done by so few for so many.

Given the presuppositional nature of negation and Erteschik-Shir's Stage Topic conception, the underlined adverbial may be construed as a link to the stage topic. (Spatio-Temporal slices within which the event takes place: e.g. here and now)

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