

# Anaphora in the Discourse Context

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Lee, Chongmin (1995). **Anaphora in the Discourse Context**. *Linguistics vol. 3*. This paper will discuss the anaphoric relatedness in the discourse situations. An anaphoric pronoun is coherently tied with the coreferential noun phrase in the previous discourse. In such a sense, the coreferential pronoun is not only connected backward, but also shares the antecedence tightness forward within the discourse boundary.

**W**e will examine several properties of the rule of pronominal anaphora in the discourse context. Before looking at the pronominal anaphora, I would like to adopt the terminology 'discourse boundary'. It is generally assumed that the anaphoric relations between an anaphor and its antecedent should be established by an interpretive rule at shallow structures ('relatively superficial level') or surface structures.

In view of the interpretive position, definite pronouns are generated at the base. Why do we need the term 'discourse boundary'? Observe the following sentences.

- (1) a. After I hit John<sub>i</sub>, he<sub>j</sub> screamed.  
b. John<sub>i</sub> screamed after I hit him<sub>i</sub>.
- (2) A: I hit John<sub>i</sub>.  
B: What did he<sub>j</sub> then?  
A: a. After I hit him<sub>i</sub>, he<sub>j</sub> screamed.  
b. After I hit John<sub>i</sub>, he<sub>j</sub> screamed.

As can be seen above, forward pronominalization applies both at

sentence level and at the discourse level. It is necessary that grammatical processes like pronominalization must be constrained so as to apply in a certain domain of discourse. But the concept of discourse boundary cannot be defined explicitly, because it depends upon a speaker's decision. It can be noted that (2) has two kinds of discourse boundaries; one contains A-B-Aa, and the other, A-B-Ab. Across the discourse boundary, the rule of pronominal anaphora obeys the c-command constraint defined in the following way (Wasow 1979: Chomsky 1981):

(3) C-Command Constraint (CCC)

No anaphoric element may c-command its antecedent in surface structure.

Our argument is motivated in discourse grammar, based on the transformation approach to anaphora. Chomsky (1965, 11) argues that the speakers would tend to avoid the unacceptable sentences and prefer the more acceptable variants wherever possible in actual discourse.

The rule of pronominalization applies across utterance boundaries, that is, in the same discourse boundaries. When a pronoun occurs at the sentence level, it is generally accepted that its antecedent is 'given' as a linguistic antecedent or as a pragmatic antecedent. The notion of 'givenness' is defined in Chafe (1974, 130). The discourse situation permits pragmatic control from the cooperative principle (cf. Grice 1975).

It is questionable how anaphoric relationships can be established when the adverbial clause containing an anaphor precedes its antecedent. There is an apparent counterexample to the concept of discourse boundary, not to the CCC.

(4) a. After I hit him<sub>i</sub>, John<sub>i</sub> screamed.

b. After I hit her<sub>j</sub>, John<sub>i</sub> screamed.

In a strict sense, the adverbial clause and the matrix sentence belong to different discourse boundaries respectively in (4), as (4a) is compared with (4b). Nevertheless, the adverbial clauses are subordinate to the following matrix sentences at the sentence level as exemplified in (5).

(5) John screamed after I hit him.

The rule of pronominal anaphora obeys the CCC at the sentence level and

within the domain of discourse boundary. On the other hand, the adverbial clauses can function as subordinate to the preceding discourse at the sentence initial position in a discourse. Keenan and Shieffelin (1976, 342) refer to stretches of discourse linked by topic collaboration and topic incorporation as continuous discourse. We can observe the following discourse:

- (6) A: What will John<sub>i</sub> do this Sunday?  
 B: a. If he<sub>i</sub> can, John<sub>i</sub> will go to see a movie.  
     b. \*If John<sub>i</sub> can, he<sub>i</sub> will go to see a movie.  
     c. If he<sub>i</sub> can, he<sub>i</sub> will go to see a movie.
- (7) A: Who will do this for me?  
 B: a. \*If he<sub>i</sub> can, John<sub>i</sub> will do it. (Kuno 1972, 307)  
     b. If John<sub>i</sub> can, he<sub>i</sub> will do it.

The structural approach with the CCC cannot account for the unacceptability of (6b) and (7a). This is because (6b) is forward and (7a) is not violating the CCC. Kuno (1972) has accounted for the unacceptability of (7a) by the constraint that the so-called backward pronominalization is possible when the referent of the pronoun is predictable without having the coreferential noun phrase to its right. But he considers (6a) as backward pronominalization and (6c) as forward pronominalization from the preceding discourse antecedent. Bolinger (1977) observes that the noun phrase in (6a) should be thought of as reidentified or repeated. Lee (1979, 82) proposes the so-called thematic constraint that the theme of the sentence can be reidentified. The theme of the sentence is roughly defined as the noun phrase containing the highest topicality. He argues that in (6a), the noun phrase is the theme of the sentence and in (7b), the noun is discourse-initial, not related to the thematic constraint. What should be noticed here is that discourse-continuous anaphora are dealt with in the domain of sentence grammar, though they are looking at the discourse phenomena.

We think that pronominalization applies across the utterance boundaries and discourse boundaries are determined optionally or obligatorily. When the pronoun is contained in the adverbial clauses, it has the preceding noun in the discourse as its antecedent. When it does not have the discourse antecedent, the rule of pronominalization always applies forward in discourse grammar. The adverbial clauses are collaborated with the preceding discourse along discourse topic.

- (8) A: a. What will John<sub>i</sub> do this Sunday if he<sub>i</sub> can?  
 b. \*What will John<sub>i</sub> do this Sunday if John<sub>i</sub> can?  
 B: a. John<sub>i</sub> will go to see a movie.  
 b. He<sub>i</sub> will go to see a movie.

On the other hand, the noun phrase as an antecedent is not contained in (7a) and pronominalization must apply forward at the discourse level. In other words, the discourse collaboration occurs in (6) and the discourse incorporation occurs in (7).

In discourse grammar, the antecedent should be supposed to appear at the discourse context, as shown in (9).

- (9) A: Who can do it?  
 B: a. John can.  
 b. \*He can.

Of course, it goes without saying that (9b) is acceptable if the discourse in (9) contains the antecedent in the pragmatic context. But we will reject this case as ungrammatical under the assumption that the prior discourse is not presupposed.

In connection with the concept of discourse boundary, we may consider the following sentences:

- (10) A: What will John<sub>i</sub> do this Sunday?  
 B: a. If John<sub>i</sub> can go to see a movie, he<sub>i</sub> will.  
 b. \*If he<sub>i</sub> can go to see a movie, John<sub>i</sub> will.  
 c. If he<sub>i</sub> can go to see a movie, he<sub>i</sub> will.

It seems that (10a) is a counterexample to our explanation. But it is not the case, because the conditional clause is complete whereas the main clause is incomplete. VP Deletion applies forward, and the conditional clause cannot be postposed without the semantic change. We can propose that the adverbial clauses to the left with the noun phrase as antecedent function as thematic adverbial and they can be interpreted as a topic sentence which is discourse-initial. When the semantic content of the adverbial clause is far richer than that of the main clause, the adverbial clause is a topic proposition. We can conclude that (10A) should not be extended to (11):

- (11) \* What will John<sub>i</sub> do this Sunday if John<sub>i</sub> can go to see a movie?

So far, we have discussed some assertions about discourse boundary in adverbial clauses. Within this framework, we can explain a number of cases of pronominalization with respect to presupposition. Postal (1971, 23) bans backwards pronominalization across a copular verb of referential identity.

- (11) a. \*What annoyed him<sub>i</sub> was my punching Bill<sub>i</sub>.  
 b. It was my punching him<sub>i</sub> that annoyed Bill<sub>i</sub>.

Keenan (1971, 45-52) has detailed what cleft and pseudocleft sentences presuppose. For instance, (11a) presuppose that something annoyed Bill. Bickerton (1975, 32-33) states succinctly that pronominalization flows bidirectionally, and across sentence boundaries, from presupposed NP to asserted NP, and between presupposed NPs. We can establish the preceding discourse like the following:

- (12) A: What annoyed Bill<sub>i</sub>?  
 B: a. \*What annoyed him<sub>i</sub> was my punching Bill<sub>i</sub>.  
 b. It was my punching him<sub>i</sub> that annoyed Bill<sub>i</sub>.

Pseudoclefting is not cleft completely, but clefting is cleft distinctly in two discourse boundaries in shallow structures. This observation can explain the answers to (12A) like; (12c) and (12d).

- (12) B: c. What annoyed Bill<sub>i</sub> was my punching him<sub>i</sub>.  
 d. It was my punching Bill<sub>i</sub> that annoyed him<sub>i</sub>.

Pseudocleft sentences are expected to function as having one discourse boundary, but cleft sentences may function as one discourse boundary or two. How can the shallow structures be assigned to the following?

- (13) a. It was John's<sub>i</sub> dog that bit him<sub>i</sub>.  
 b. \*It was John's<sub>i</sub> dog that he<sub>i</sub> bit.  
 c. \*What bit him<sub>i</sub> was John's<sub>i</sub> dog.  
 d. \*What he<sub>i</sub> bit was John's<sub>i</sub> dog.

I think that clefting is a preposing rule and pseudo clefting is a postposing

rule (Cf. Kuno 1971). The postposing rule in a given sentence retains the same order of anaphoric relation, while the preposing rule undergoes reversal in the given order and the shallow structure is changed as in (14):

- (14) a. John's<sub>i</sub> dog bit him<sub>i</sub>.  
 b. \*He<sub>i</sub> bit John's<sub>i</sub> dog.

It is necessary to revise and expand the concept of shallow structures and it can accommodate the logical form further. To the contrary to Bickerton's argument that no explanation solely in surface structure can be adequate although coreferentiality might appear to be affected by surface ordering, we can explain the anaphoric processes at surface structure level.

Let's look at the following from Bickerton (1975, 25):

- (15) A: What did you do to Bill<sub>i</sub>?  
 B: a. Punched him<sub>i</sub>, that's what I did to Bill<sub>i</sub> to annoy him<sub>i</sub>.  
 b. \*Punched Bill<sub>i</sub>, that's what I did to him<sub>i</sub> to annoy him<sub>i</sub>.  
 c. \*Punched him<sub>i</sub>, that's what I did to him<sub>i</sub> to annoy Bill<sub>i</sub>.

In (15B), some kind of subject deletion applies and therefore, (15A) and the left part to the comma in (15Ba) are grouped into a discourse boundary (15Bb) is ungrammatical because of the noun in the same discourse boundary. It is a natural consequence that the rest of (15B) function as a discourse boundary; (15Ba) is a case of forward pronominalization, but (15Bc) is backward violating the CCC.

The discourse contexts have an effect on the grammaticality distribution assigned by the presupposition and assertion distinction. Keenan and Schieffelin (1976, 338) take the term 'discourse topic' to refer to the PROPOSITION about which the speaker is either providing or requesting new information. But it would predict noncoreferentiality for (16).

- (16) My punching him<sub>i</sub> was Bill's<sub>i</sub> major gripe.

It is not the case of non-coreferentiality. Bickerton (1975, 25) says that the noun phrase 'Bill's major gripe' is presupposed. I think that the noun phrase wears 'genericness.' The genericness is not in the domain of syntax, but in the scope of pragmatics. It seems that pragmatic presupposition is involved. Furthermore, the noun phrase in the generified proposition can be likely to

appear as independent discourse boundary. At sentence level, we can notice the following differentiations;

- (17) a. \*I caught it<sub>i</sub> when the virus<sub>i</sub> came along.  
 b. I always catch it<sub>i</sub> when the virus<sub>i</sub> comes along.

The temporal clause is captured as part of the main VP in (17a), that is, VP-adverbial. Bolinger (1977, 30) suggests that the adverbial clauses have a meaning that is more normal to a higher sentence in (17b). Given the fact that a virus comes along, I always catch it in (17b); the generic sentence or generic interpretation is allowed as discourse proposition independently of the CCC.

From these observations, it can be supposed that the adverbial clause in (17b) is more or less generified in the discourse context. The adverbial clause represents the pragmatically presupposed information between the speaker and the hearer. The concept of predictability plays a decisive role here at the discourse level. Consider the following;

- (18) A: What annoyed Bill<sub>i</sub>?  
 B: a. (?)My punching him<sub>i</sub> annoyed Bill<sub>i</sub>.  
 b. I think Tom's punching Bill<sub>i</sub> annoyed him<sub>i</sub>.

It has been proposed by Kuno (1972, 297) that one does not usually form a question which does not contain any old information. The questions in (18) has a given information such as something that annoyed Bill or the fact that Bill is angry respectively. Furthermore, Wh-questions are collaborated with the answer parts just like pseudo-clefting; these are linearly ordered in the same discourse boundary.

- (19) a. What annoyed Bill<sub>i</sub> is my punching him<sub>i</sub>.  
 b. Why Bill<sub>i</sub> is so angry is Tom's punching him<sub>i</sub>.

This paper attempted to investigate how discourse topics are initiated and sustained in discourse situations. It is appropriate for the speaker to use anaphoric pronouns when the speaker and hearer assume that they know the referent. At the discourse level, it is assumed that the antecedent should be present in the prior discourse context.

### Notes

1. Throughout this paper, an asterisk indicates merely 'ungrammatical' on a coreferential reading.
2. The discourse boundary and the discourse topic have some common properties in segmenting the whole discourse. The discourse as a whole has a continuous flow, so it is necessary to divide it into several units.
3. The reappearance of the full noun phrase is permitted if its referent has been given in the discourse context. At the sentence level, this assumption is implicitly sustained.

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