ANAPHORIC PENINSULAS

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Neither the questions that are to be raised in this paper, nor the proposed analysis is entirely new. Questions regarding the Anaphoric Island Constraint (AIC) as proposed by Postal (1969) have been discussed in various squibs and papers by Watt (1973 a,b), Ross (1971), Doulourеux (1971), Lakoff and Ross (1972), and Shibatani (1972). My attempt will be to draw together the questions that have been raised, point out an underlying generalization present in all the previous discussions, and suggest an alternative analysis to the notion of an Anaphoric Island Constraint.

The Anaphoric Island Constraint prohibits reference from an anaphoric pronoun to any part of the meaning or internal semantic structure of an antecedent. A pronoun cannot be anaphorically linked to a NP 'inside' the antecedent. In this way "lexical items are anaphoric islands with respect to outbound anaphora involving coreferential pronouns" (Postal 1969). Postal presents many examples of the constraint prohibiting reference to part of the internal structure of an island, e.g.:

(1) a. Max's parents$_i$ are dead and he deeply misses them$_i$.

b. *Max is an orphan and he deeply misses them.
(them = Max's parents)

where (1b.) violates the constraint. Since an orphan, meaning 'an individual whose parents are dead', is a lexical item, the pronoun them cannot get 'inside' the surface form of this lexical item and refer to 'parents'.

Soon after the statement of the AIC a number of exceptions were discussed (see references above). It appears that reference into islands does occur, though the acceptability of such cases is subject to wide idiolectal variation.[1] For example, in the dialect of the present writer the following sentences are acceptable:

(2) Sargeant Pepper claims not to drink, but I have seen him take one now and then. (one = a drink)
(3) Jim reviewed that book and it will be published in Linguistic Inquiry. (it = the review)
(4) Shakespearean imitators usually fail to capture his style. (his = Shakespeare's)
(5) I speak French fluently because I lived there for eight years. (there = France)
(6) Barbara Walters interviewed Howard Hughes, but it won't be broadcast until Saturday. (it = the interview)

All, none, or some of these examples may be acceptable to the reader. I have found that the threshold of acceptability for sentences such as these varies greatly from speaker to speaker. Not being a study of idiolectal variation, what is relevant here is that

exceptions to the AIC do exist. I will refer to dialects which find such exceptions acceptable as peninsular dialects. While exceptions even relatively few in number merit attention, the number of apparent violations of the AIC is widespread enough to question the value, and ultimately, the existence, of such a constraint.

Watt (1973 a,b) discusses such exceptions in depth, calling "penetrable reefs" the lexical items that allow reference to a part of their meaning. [2] Douloureux (1971) notes that verbs that produce a (foul) body substance allow anaphoric reference to that substance, [3]

(7) Someone must have farted; I can smell it.
(8) If you have to shit in here, try not to get it on the rug.

Lakoff and Ross (1972) are the first to suggest that certain principles may determine the acceptability of sentences such as:

(9) John became a guitarist because he thought it was a beautiful instrument.
(10) McCarthyites are sad, because they voted for him and he lost.

They note that morphological similarity holding between the anaphor and the surface form of the antecedent plays an important role in rendering violations of the AIC acceptable. Their principle

(II) Outbound anaphora from lexical items admits of three degrees of deviance:

A. If the lexical item and the antecedent are not morphologically related, the sentence is unacceptable.
B. If the lexical item and the antecedent are morphologically related and if the lexical item commands the pronoun, the sentence is judged as deviant, but not to the same extent as starred sentences.
C. If the lexical item and the antecedent are morphologically related and the lexical item does not command the pronoun, the sentence is either of moderately questionable acceptability or fully grammatical, depending on the idiolect of the speaker.

is based on both surface morphological structure and syntactic structure. This principle will be discussed in more detail below.

What is important to note in all the examples (2) - (10), is that the rule of PRONOMINALIZATION that links the anaphoric pronoun to a 'part' of the meaning of the antecedent takes place pre-lexically, i.e. before the rule of LEXICALIZATION incorporates the 'parts' of the meaning into the lexical item that appears on the surface. Already it is clear that I presuppose a theory of grammar consistent with the position that the meaning of lexical items is fully specified in the semantic structure and that the lexical items are transformationally derived, the parts of meaning being replaced by the lexical item by a rule of LEXICALIZATION that may occur after certain syntactic rules, such as PRONOMINALIZATION, have occurred. I contrast this position with the 'lexicalist' position that holds all lexical items

to be introduced directly from the lexicon at a level of 'deep structure', all insertion taking place prior to any syntactic rules.

Anaphoric reference to a 'part' of an underlying meaning verifies the existence of that 'part' at some level of derivation and confirms the position that pre-lexical syntactic rules do exist. Consequently, the existence of examples such as (2) - (10) has important theoretical import. Such examples are abundant. I will discuss further instances at this point. I have not marked these examples with respect to relative acceptability; some may be better than others, some may be totally unacceptable for some speakers (cf. footnote 1). What is of concern here is that some or all of the following examples do indeed occur in the dialect of a great many speakers.

The first group indicates that Doulourеux's analysis (1971) may be extended to many verbs that 'produce' something, not just those producing a foul body substance.

(11) I won't answer your objections since they don't require one.[4]
(one = an answer)
(12) Tom dreams a lot but seldom remembers them.
(them = dreams)

Certain deletion phenomena allow anaphoric reference from some to a noun cognate with the verb in the following examples:[5]

(13) Whenever I asphalt a parking lot, I always take some home.
(some = asphalt)
(14) When I painted the garage, I spilled some on the driveway.
(some = paint)

In arguing for the derivation of Proper Pseudo-Adjectives (PPA) from underlying NPs, Postal claims that PPAs, like NPs, are islands, and thereby subject to the AIC. I offer the following examples as acceptable indicating that PPAs are indeed like NPs in that they too violate the AIC. Reference by a pronoun to the NP from which the PPA is derived is acceptable, e.g.:

(15) All linguistic journals should be sent to that department.
(that = linguistics)
(16) The American attack on Hanoi constitutes their third violation of the cease-fire. (their = America's)
(17) The feminist response to that question indicates their position. (their = the feminists')
(18) The Bosnian Medical Association claims the first appendix transplant was done there. (there = Bosnia)

Given the numerous examples of this type that exist in the peninsular dialects, the argument that PPAs are derived from underlying NPs is strengthened.

Finally, the most restricted class of exceptions involves reference to an underlying part of meaning 'inside' the lexical item that is a surface NP. The degree of productivity of the morphological process involved in deriving the antecedent NP is a relevant factor. Note the following examples:

(19) New Yorkers think it's a swinging city. (it = New York)
(20) I like Americans, but I wouldn't want to live there. (there = America)
(21) Childhood should be a time they'll remember. (they = children)

Up until now I have only discussed exceptions to the AIC. 'Exceptions' alone do not invalidate a rule or constraint. In this way they differ from 'counterexamples'. Given numerous exceptions, however, to a particular rule or constraint, one may suspect that such exceptions indicate another, more basic, generalization underlies the phenomena. In order to account for the peninsular dialects, i.e. those that accept some or all of the examples we have been discussing, as well as the island dialects, those that do not allow reference to any part of their internal semantic structure, we must arrive at a more general explanation than the AIC provides.

There are several possible ways to approach the exceptions to the AIC that are exhibited by the peninsular dialect. One may try to uncover certain principles that underlie the acceptable cases of reference. Such principles are suggested by Lakoff and Ross, as mentioned above. While these principles have obvious relevance in determining the acceptability of many of the sentences for the peninsular dialects, they do not accurately characterize all the sentences. For instance, Lakoff and Ross' principle II. A. states that morphological similarity is required between the surface antecedent and the 'part' of the underlying meaning referred to in order for the sentance to be grammatical, but this is not always the case:

(22) When Little Johnny threw up, was there any pencil eraser in it? (Douloureux 1971)
(23) Tom got his third traffic violation in as many weeks.

Lakoff and Ross' second and third principles concern the relationship of command between the anaphor and the antecedent. An apparent violation to this principle appears if the lexical item is found to command the pronoun, yet the sentence is not deviant for the peninsular dialect:

(24) Even the most enthusiastic Nixonites don't trust him.

Another analysis that might be proposed would explain the acceptance of peninsular reference by 'interpretation'. For the peninsular dialects that allow reference it would appear that the AIC has been relaxed. Ross suggests that constraints may be "ammestied" according to the "audibility" of the violation involved. [6] The less audible the violation, the more subtle the work the listener must do to reconstruct the expected form. This notion is supported by the Lakoff and Ross principle of necessary morphological similarity. A hierarchy of violations could be established with the lack of morphological similarity ranking at one end, a command relationship holding between antecedent and anaphor as next in the hierarchy, and so on.

While such an analysis provides an interesting account of surface facts, it gives no clue as to the processes that produce the so-called deviant sentences. Recent work by Lakoff (1972, 1973) and Ross (1972, 1973) gives important evidence that grammatical elements may belong to a certain category only to a degree, that constructions such as islands may only be islands to a degree. These phenomena are ranked into hierarchies indicating the varying degrees of the threshold of acceptability for different speakers. Clearly indicated by the phenomena, we see that grammatical rules don't merely apply or not apply, but may apply to a degree.

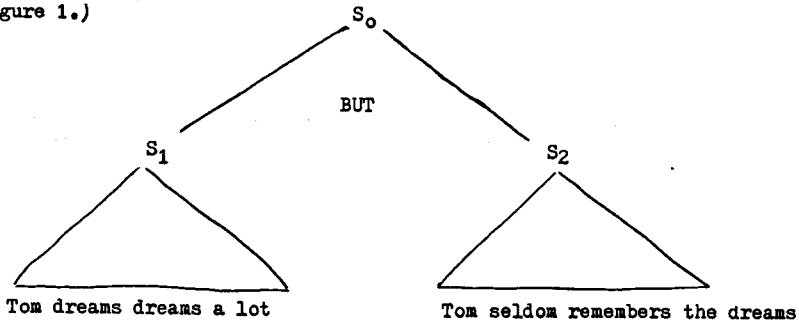
These facts can be extended to the notion of constraints and specifically to the AIC. At one end of the hierarchy the constraint would be most strongly stated, blocking any anaphoric reference 'inside' the internal structure of the antecedent. This would correctly characterize the island dialect as outlined in Postal (1969). At the other end of the hierarchy the constraint would be most weakly stated, allowing cases of reference 'inside' the lexical item serving as antecedent. This would characterize the peninsular dialect, though all the varying degrees of acceptability that would occur in the hierarchy following the strict island dialect would be peninsular by definition, perhaps best stated as peninsular to a degree.

While only an in-depth study of dialects and degrees of acceptability would provide statistics, I will suggest that the dialects admitting some degree of acceptability of peninsular reference are more natural and better characterize the notion of anaphoric reference than does a strict island dialect. This brings us to the question of the value of the AIC. The constraint, as stated, is compatible with the lexicalist position whereby lexical items are imported directly from the lexicon into the grammar prior to any syntactic transformations.[7] Not only is the constraint compatible with such a position, but it is a necessary outcome. If lexical items are held to be basic and not derived, it should be impossible to have anaphoric reference to any part of their internal meaning, since such a 'part' would at no level of the derivation be available to participate in an anaphoric relationship. The fact that reference 'inside' a lexical item does indeed exist as has been discussed in the preceding pages presents a severe problem for the lexicalist hypothesis. The existence of peninsular dialects is in contradiction to the position that all lexical items are introduced prior to any syntactic rules.

Operating within the framework that lexical items can be derived, the parts of their internal semantic structure are incorporated into a lexical item by a lexicalization rule and there is no need to state an AIC. For peninsular dialects pronominalization takes place prior to the lexicalization rule, allowing anaphoric reference to some part of the meaning that will be incorporated into the surface lexical item. For island dialects that do restrict such reference, the lexicalization rule will precede pronominalization and by incorporating the parts of meaning, destroy the environment for pronominalization. There is no need to state a constraint since pronominalization can't apply anyway.

In order to formalize these phenomena we need to refine the processes. We would like to present the properties of both dialects as a single unified phenomenon rather than as separate statements. I propose a rough sketch of the underlying representation of the above sentence (12) Tom dreams a lot but seldom remembers them as follows:

(Figure 1.)



The proposed derivation for a peninsular dialect applies pronominalization first and then a lexicalization rule incorporates dreams dreams into the single surface lexical item dreams. For the island dialect, however, the lexical incorporation rule takes place earlier in the derivation thus destroying the environment for pronominalization. An island dialect would probably derive the surface form:

(25) Tom has dreams a lot but seldom remembers them.

In order to present this as a single statement I propose a transderivational solution. A transdervational rule or constraint, in its broadest sense, allows one derivation to 'look' at information present in another derivation. There are several possible relationships that may obtain between the corresponding derivations. This analysis is based on an equivalence relationship holding between the derivations. Thus, at the level of semantic structure a logically equivalent relationship would mean one logical structure. In the derivation of the above sentence (12) for the island dialect the fully specified NP dreams is available for pronominalization throughout the derivation. In the corresponding derivation of the peninsular dialect the lexicalization rule takes place first. Then pronominalization can take place on the basis of the information present in the corresponding derivation for the island dialect. The peninsular dialect 'looks' to the island derivation for the fully specified form of the antecedent in order to pronominalize.

The idea of specifying the semantic representation in its full syntactic form at an underlying level so that pronominalization may occur prior to the deletion of all or part of the antecedent is the

position taken by Grinder and Postal in their article "Missing Antecedents". They prove convincingly that sentential pronouns do arise through pronominalization of some or all of a full syntactic representation rather than the pronouns being present in their pronominal form in the base as is the argument of the interpretive approach taken by Bresnan (Bresnan 1971). The analysis proposed by Grinder and Postal is very similar to the one I have just proposed. In both cases pronominalization takes place when all parts of the antecedent structure are fully specified, regardless of what later happens to the form of that antecedent.

In Postal's reply to Bresnan's interpretive approach he suggets that the sentential pronouns that refer to missing antecedents may indeed be derived in a transderivational analysis where the full antecedent structure necessary for pronominalization is present in a corresponding derivation. I am suggesting that a transdervational analysis to the missing antecedent phenomena would look very much like the one I have presented here. This similarity opens the enticing possibility that two anaphoric processes that had previously been treated differently are really one and the same process, thus bringing us closer to understanding the underlying unity that characterizes all anaphoric processes. My analysis likewise is compatible with and offers support to the argument that PPA are derived from underlying NP in that for the dialects that do allow reference into a PPA we see that this reference is based on an underlying form that must be a NP.

That pronominalization does occur prior to lexical incorporation for the peninsular dialect discussed here offers another strong argument for the existence of prelexical syntax, an argument that was previously impeded by the AIC.

Indeed, the dialects that observed the AIC must be accounted for as well as the peninsular dialects. I have suggested that a transdervational analysis not only handles these dialects as a unified phenomenon, but more importantly links two anaphoric processes giving us a more general understanding of anaphoric devices.

FOOTNOTES

1. I will not attempt to scale the deviance of any of my examples with the oft used ?* or ? or ?? or whatever. Some of the examples are more deviant than others. Unless starred * they will be assumed to be acceptable for the peninsular dialect I am discussing. The varying degrees of deviance are not of as much interest here as the underlying processes that produce these forms. Some speakers may accept all, some, or none of the examples.

2. I have chosen the word 'peninsula' as better characterizing the anaphoric relationship between an antecedent and its anaphor. "Reef" has several senses that I do not wish to attribute to this relationship. I always associate reef with shipwrecks, a more convincing reason not to use this term was pointed out to me by Avery Andrews. He has informed me that in a certain rural dialect 'to reef' means 'to yank fuckin' hard'. I would

rather characterize the anaphoric processes with a more natural term.

3. I don't know who to credit with the very appropriate term for the pronoun 'it' in these cases, that is 'the despicable it'.

4. This example was pointed out to me by Jim McCawley.

5. From Georgia Green (1972)

6. Communicated via telepathy.

7. "The correct generalization seems to be that items that have a lexical entry are "anaphoric islands." Thus nouns, verbs, adjectives, and idioms are anaphoric islands. There are no anaphoric processes "internal" to such expressions as orphan, book, American, lighthouse keeper, kick the bucket, etc. No doubt refinements are needed, but this seems to be the basic principle. It is expressible easily in terms of the notion "lexical entry." Again, these considerations seem to me to add some slight support for a theory such as the (extended) standard theory that incorporates this notion in an essential way." (Chomsky 1970, pg. 35.)

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