

On the Topicalization of Indefinite NPs*

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0. Introduction.

Attempts have been made to place restrictions on the morphological and/or semantic types of constituents which can be preposed via Topicalization. In particular, it has been claimed that certain types of indefinite NPs cannot be preposed. For example, it has been claimed only specific indefinites can be preposed, that only nonspecific indefinites can be preposed, and that no indefinites can be preposed. In this paper, we will show that in fact none of these conflicting claims can be maintained, as seen in the topicalized nonspecific indefinite NP in 1a and in the topicalized specific indefinite NPs in 1b:

- (1)a.A: Do you think you'd be more nervous in a job talk or a job interview?
B: **A job talk I think you'd have somewhat more control over.** [S. Pintzuk, in conversation]
- b. I'll have to introduce two principles. **One I'm going to introduce now and one I'm going to introduce later.** [T. Wasow, in lecture]

On the other hand, these previous analyses have all attempted to account for the same general observation, namely, that NPs which represent entities brand-new to the discourse are not felicitously preposed in Topicalization. While it is true that such NPs are not preposable, we argue that what is relevant is neither the morphological/lexical features of the NP nor the specificity of the entity represented by that NP, but rather the particular relationship which must obtain between the entity in question and other entities in the discourse model. While these categories are clearly related, the relationship is not isomorphic and the three must be kept distinct.

1.0. Previous analyses.

1.1. Hankamer 1971.

In a very early discussion of the discourse constraints on Topicalization, Hankamer 1971 introduces a notion of 'presupposition', by which is meant the prior evocation in the discourse of the entity represented by the NP in question. His claim (p. 217) is that only 'presupposed NPs' may be preposed in Topicalization and from this it is inferred that indefinite NPs may not be preposed. Thus, Hankamer stars 2a but not 2b:

- (2)a.*A sandwich, I'll put in my lunch basket. [= Hankamer 1971:217, vi]
b. The sandwich, I'll put in my lunch basket. [= Hankamer 1971:217, vii]

While we understand the motivation behind his basic intuition, we point out that there are two problems with the account. One is that the prior occurrence in the discourse of the entity in question is in fact not required; see, for example, 3a. The

second is that it is not the case that an NP must be definite just because the entity it represents has already been evoked; see for example 1a above and 3b:

- (3)a. [Grandpa and Herman are trying to find a buried treasure in their backyard by means of a map. The map refers to an oak tree.]
Persimmon trees we got. Cypress trees we got. Oak trees we haven't got.
 [The Munsters, Grandpa]
- b. A 'course of events' is a function from locations to situation types. Like a situation type, it is partial; a course of events may tell us about what is going on at one location, or at a hundred, or even at all of them assuming there is a totality of locations. **A course of events that is defined on just one location we call a 'state of affairs'**. [Barwise and Perry 1983:9]

1.2. Kuno 1972.

A somewhat different approach is taken in Kuno 1972, where the analysis is in terms of theme rather than presupposition. In particular, Kuno claims that the preposed NP in a Topicalization must represent the 'theme' (p. 310) and that a theme must be 'anaphoric' or generic (p. 301), where anaphoric is defined as representing an entity already 'in the registry of discourse', either because it has been mentioned previously or because it is in the 'permanent registry' (p. 271). However, this is too strong in that it disallows Topicalizations like the one in 4a, where the preposed NP is neither anaphoric nor generic in Kuno's sense, and it is too weak in that it would allow the infelicitous Topicalization in 4b, where the entity represented by the preposed NP is in the 'permanent registry':

- (4)a. I became a waitress because I needed money fast and you don't get it an an office. My husband and I broke up. [...] The fast buck, your tips. **The first ten-dollar bill that I got as a tip, a Viking guy gave to me.** He was a very robust, terrific atheist. [Terkel 1974:390]
- b. #Oh, I just heard some good news--**Harvard University I got into.**

Furthermore, Kuno also associates the information-status of the entity an NP represents with (morphological) definiteness by stating that indefinite NPs represent 'new, unpredictable information' (p. 304), at least so long as they do not have stressed quantifiers (p. 301). Therefore, it follows that indefinite NPs which do not have a stressed quantifier may not be felicitously preposed by Topicalization. This, as we have already seen in 1a and 3a,b, is not borne out by the data.

1.3. Gundel 1974 and Davison 1984.

In addition, as mentioned above, certain claims have been made as to the specificity of indefinite NPs with regard to Topicalization.¹ Curiously, these claims are mutually incompatible. On the one hand, Davison (1984:814) claims that the only indefinite NPs that can occur felicitously in marked syntactic constructions, of which Topicalization is an exemplar, are *specific* indefinites. Therefore, Davison can account for the apparent infelicity of 5:

- (5)a. #A movie we're going to see tonight, but we haven't decided which one.
 b. #A Norwegian John wants to marry, but none want to marry him.

On the other hand, Gundel (1974:187) claims that preposed indefinite NPs of (Topic-)Topicalization are limited to a *nonspecific* interpretation. This accounts for the apparent infelicity of 6a,b, where only a specific reading is possible:²

- (6)a. #A certain monkey I saw. [= Gundel 1974:187, 29b]
 b. #A Norwegian John wants to marry, but she doesn't want to marry him.

However, an examination of a corpus of naturally-occurring data reveals that neither claim can be maintained. First, consider the examples of preposed indefinites in the Topicalizations in 7, which, contra Davison, permit a nonspecific interpretation:

- (7)a. Brains you're born with. **A great body you have to work at.** [Brooke Shields, in health club commercial]
 b. To illustrate with a simple analogy, consider a person who knows arithmetic, who has mastered the concept of numbers. In principle, he is now capable of carrying out or determining the accuracy of any computation. **Some computation he may not be able to carry out in his head.** Paper and pencil are required to extend his memory. But the person does not have to learn something new to carry out a more complex computation, using paper and pencil. [Chomsky 1980:221]
 c. I'm expropriating 'text' sort of as a technical term. **Some other environment I wouldn't call a text.** [S. Weinstein, in lecture]

Thus we see that NPs which are interpreted as nonspecific can, in fact, be felicitously preposed.

Similarly, we also find, contra Gundel, examples of preposed indefinite NPs which can be interpreted specifically. Consider, for example, the preposed specific indefinites in 8:

- (8)a. **Several of these questions I will try to answer--**but, let me emphasize, from a personal rather than a general viewpoint. [Nixon 1962:xiii]
 b. There are a couple of nice points in there. **One point I can say something about.** The other I'm not sure. [L. Spelke, in lecture]
 c. I've been to two [BLS parties]. **One of them I met [X] at.** [I.A. Sag, in conversation]

Davison (1984:828) also claims that quantified indefinite NPs are 'not particularly felicitous' when preposed.³ However, consider 8a, containing the indefinite quantifier *several*, and the examples in 9, containing the indefinite quantifiers *most*, *a lot*, and *some*:

- (9)a. America wants to know: Did she buy a whole new wardrobe for school? 'Not really. I have a great deal of clothes.... **Most of my stuff, my mom gets at Alexander's,**' she laughs... [Brooke Shields, Philadelphia Inquirer, 11/6/83]
- b. You know what another problem is today? The upper echelon of the management hasn't the faintest idea of what's going on in the business. I report the likes and dislikes of the workers. **A lot of them I get along with** and I tell them, 'The guys are right and the system's no good, it stinks, get rid of it. [Terkel 1974:290]
- c. I've never been held up. We have a foot alarm, one that you just tip with your toe. At the other place, we had a button you push, which was immediately under the counter. **Some people, you get a funny feeling about.** Like, I don't think that's his passbook, it's probably stolen. [Terkel 1974:347]

2.0. Discourse condition on felicitous preposing.

In Prince 1981a, an alternative account was proposed which seemed to accord better with the data, though it too had certain drawbacks. That is, it was claimed that, for an NP to be felicitously preposed in Topicalization, it had to represent an entity that was either already evoked in the discourse or else was inferentially related, via a salient set-relation, to an entity already evoked in the discourse.⁴

No mention was made of the definiteness of the NP, and, we believe, correctly so, since the relation between referential status and definiteness, which is a complex one, is independent from Topicalization; that is, whatever relations hold between an NP's referential status and its definiteness in the language as a whole will hold in the case of a preposed NP in a Topicalization.

The drawbacks with this analysis were twofold. First, the disjunctive nature of the condition showed a lack of generalization: why should evoked entities pattern like entities related by a set-relation inference? Second, the notion of set-relation was rather loosely construed to accommodate examples like 10:

- (10)a. A: You know this album?
 B: **This song I know.**
 [Overheard in conversation, Univ. of Penn.]
- b. A: What are you having?
 B: I usually get soup.
 A: **Maybe this one [soup of the day] you wouldn't like.**
 [Waitress to customer at Deluxe Diner, Phila.]

That is, in 10a, an album is not quite a *set* of songs; rather, it is a unitary object which has songs as *parts*. Similarly, in 10b, the particular soup of the day, e.g. clam chowder, is not quite a *member* of some set 'soup' but is rather a *subtype* of the *type* 'soup'.

In Ward 1985, a revised condition on felicitous preposing in Topicalization was proposed which both captures the generalization formerly missing and accommodates inferences such as those in 10, as well as simple set-inclusion inferences:

(11) **Discourse Condition on Preposing in Topicalization:**

The entity represented by the preposed constituent must be related, via a salient partially ordered set relation, to one or more entities already evoked in the discourse model.

Partially ordered sets, or **posets**, are defined by a **partial ordering R** on some set of referents, **b**, such that, for all **b-1**, **b-2**, and **b-3** that are elements of **b**, **R** is either reflexive, transitive, and antisymmetric (cf. 12a) or, alternatively, irreflexive, transitive, and asymmetric (cf. 12b).

(12)a. REFLEXIVE: **b-1 R b-1**

TRANSITIVE: **(b-1 R b-2 and b-2 R b-3) --> (b-1 R b-3)**

ANTISYMMETRIC: **(b-1 R b-2 and b-2 R b-1) --> (b-1 = b-2)**

b. IRREFLEXIVE: **b-1 R b-1**

TRANSITIVE: **(b-1 R b-2 and b-2 R b-3) --> (b-1 R b-3)**

ASYMMETRIC: **(b-1 R b-2) --> (b-1 ≠ b-2)**

A relation satisfying the second definition is IS-TALLER-THAN, and one satisfying the first is IS-AS-TALL-OR-TALLER-THAN. Note that we can always start with a relation satisfying the second definition and produce one satisfying the first by adding an equality disjunct to the relation. Other relations satisfying this definition include: IS-A-PART-OF, IS-A-SUBTYPE-OF, and IS-A-MEMBER-OF.

This notion allows us to rank discourse entities as elements in posets. An element in a poset may be associated with an entity, attribute, event, activity, time, or place -- or with a set of such items. We can rank a property with respect to some entity which exhibits it via the relation IS-AN-ATTRIBUTE-OF; an event, with other events, according to temporal precedence; elements or proper subsets of a set with respect to the set by an inclusion relation; and so on. An example of a poset involving a part-whole ordering is provided in 13:

(13)A: Have you read the dissertation?

B: I've read the examples.

Here, A's query evokes the entity 'the dissertation', which can be perceived as cooccurring with the entity evoked by B's response *the examples* in the poset {parts-of-a-dissertation} ordered by the relation PART-OF. For further discussion of posets as they relate to linguistic form, see Hirschberg 1985, Ward 1985, and Ward and Hirschberg 1985.

Interestingly, it turns out that the entity represented by the preposed constituent in a felicitous Topicalization stands in a salient poset relation to other salient entities previously evoked in the discourse model. First, consider the following examples illustrating the various types of ordering relations that can support Topicalization:

(14)a. IS-A-MEMBER-OF relation:

He [Colonel Bykov] had delivered to Chambers in Washington six Bokhara rugs which he directed Chambers to present as gifts from him and the Soviet Government to the members of the ring who had been most co-operative. **One of these rugs Chambers delivered to Harry Dexter White. Another he gave to Hiss--**but not as a routine 'payment on rent'. [Nixon 1962:58]

b. IS-PART-OF relation:

EP: How do you like your new job?

AB: I like a lot of it. **Parts of it I don't like at all.**

[A. Bower, in conversation]

c. IS-A-SUBTYPE-OF relation:

GW: Which staples should I use?

CC: Use the half-inch ones. **The smaller ones we never use.**

[C. Connelly, in conversation]

d. IS-EQUAL-TO relation:

RS: If there're fewer than five students then I guess we can start. How many are there?

TS: Five.

RS: **Five students we don't have to wait for.** More than that we would.

[R. Stockwell, LSA Summer Institute, UCLA]

In addition, two elements which cooccur in some poset **P** can be related to each other in one of three possible ways. One can be lower than the other, one can be higher than the other, or the two can be of equal rank, or 'alternates'. This definition is provided in 15:

- (15) Two elements, **b-1** and **b-2**, which cooccur in some poset, **P**, can be related to each other in one of three possible ways: **b-1** can be HIGHER than **b-2**; **b-1** can be LOWER than **b-2**; or **b-1** and **b-2** can be ALTERNATES. **b-1** and **b-2** are alternates iff **b-1** and **b-2** are both higher or lower than some third element **b-3** and are *not* ordered with respect to one another by **R**. (Cf. Hirschberg 1985.)

Examples illustrating these three possible orderings are provided in 16:

(16)a. Higher element:

When I was on surveillance, during this hijacking case, we're working for a newspaper. The guys delivering were selling papers on the side. The newspaper was earning a fortune. These guys knew they were being

tailed and they still continued the same shit. **People like that you have no sympathy for**, they're stupid. [Terkel 1974:212]

b. Lower element:

GW: Have you finished the article yet?

MR: Almost. **The conclusion I still have to do.**

[M. Rendell, in conversation]

c. Alternate elements:

GW: Did you get any more clues to the crossword puzzle?

SM: No. **The cryptogram I can do like that.** The crossword puzzle is hard.

[S. Makais, in conversation]

The possible orderings of **b-1** and **b-2** in **P** are illustrated in these examples. In 16a, the poset can be defined by the ordering relation TYPE-SUBTYPE defined over the set of people displaying a particular behavior. Here, **b-1** *people like that*, represents a higher element in **P** than the evoked **b-2** *these guys*. In 16b, the evoked poset can be defined by the ordering relation IS-A-PART-OF defined over the set {parts-of-an-article}; **b-1**, *the conclusion*, represents a lower element in **P** than the queried **b-2**, 'the article'. Finally, in 16c, **b-2**, *the crossword puzzle*, and **b-1**, *the cryptogram*, are alternates in the poset {word puzzles}, defined by set inclusion.

Note that relations which do not fit the poset definition, e.g. relations that are not transitive or that are symmetric, are disallowed in felicitous Topicalization. For example, the relation of functional dependence, which is sufficient to support, for example, the use of a definite article, as shown in 17a, is insufficient to support Topicalization, as shown in 17b:

(17)a. John went into a restaurant and he asked for **the menu**.

b. #John went into a restaurant and **the menu** he asked for.

The reason, we claim, is that posets may not be ordered by a functional dependence relation, because the latter is not transitive, as shown in 18:

(18)a. We ate in a terrible French restaurant last night. #**The cork was green**.

b. We ate in a terrible French restaurant last night. The wine was awful.
The cork was green.

In 18a, the second sentence is infelicitous because no obvious relation holds between (*French*) *restaurant* and *cork*. However, we see in 18b that a functional dependence relation does indeed hold between (*French*) *restaurant* and *wine* and between *wine* and *cork*. We conclude that functional dependence is not transitive.

Thus we find that those relations that must obtain between an entity and something in the context for the NP representing that entity to be felicitously preposable in Topicalization are just those relations that form a natural class on independent grounds, the poset relations.

3.0. Definiteness and poset relations.

Let us now reconsider the original question of the relation between definiteness/specificity and Topicalization. As is well known, an entity which is brand-new in the discourse is typically represented by an indefinite NP. By 'brand-new', we mean here entities which have not been mentioned, are assumed not to be already known to the interlocutor, and are not inferentially related to entities which have been evoked in the discourse model (Prince 1981b). Now, it follows from the Discourse Condition on Preposing (cf. 11) that the preposed NP cannot represent a brand-new discourse entity, and, therefore, the class of indefinite NPs representing them will of course be infelicitous when preposed by Topicalization.

However, it is *not* the case that all indefinite NPs represent brand-new entities, and when the entities they represent are related to the prior discourse by a salient poset relation, then and only then may they be felicitously preposed in Topicalization, all other things being equal. For example, indefinite NPs may represent nonspecific entities already evoked, as in 1a, 3b, and 14d; indefinite NPs may represent members of evoked sets, as in 1b, 7b, 8a,b,c, 9a,b,c, and 14a; indefinite NPs may represent parts of evoked entities, as in 14b, and so on, and clearly all of these are preposable. Thus we see that definiteness and Topicalization are in fact independent.

As for the alleged constraints on specificity in Topicalization, we see that Topicalization may prepose both specifics, cf. 1b, 8a,b,c, 9b, and 14a,b, and nonspecifics, cf. 1a, 3a,b, 7a,b,c, 9c, and 14d. And, of course, specificity is unrelated to the poset condition posited above.

In conclusion, we have shown that what is relevant for the preposability of an NP in Topicalization is not its intrinsic morphological/lexical/semantic properties but rather the relation of the entity it represents to other entities in the discourse structure, that only certain relations are relevant, and that the set of relevant relations in fact constitutes a natural class on independent grounds.

Notes

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¹Most previous studies of Topicalization have been limited to an analysis of proposed NPs. Ours will be as well, since our paper addresses the issue of the relationship between definiteness, a property of NPs, and Topicalization. However, as argued in Ward 1985, this limitation is, in general, arbitrary and unmotivated.

²Although the specific/non-specific distinction has been called into question (e.g. Fodor and Sag 1982), it has generally been assumed that a sentence like *John wants to marry a Norwegian* is ambiguous between the specific interpretation in 6b (a statement about a particular Norwegian woman), and the nonspecific interpretation in 5b (a statement about the class of Norwegian women).

³Davison restricts her claim regarding infelicitous quantified indefinites to those with 'neutral' intonation, and 'collective' interpretations. However, the counterexamples below in fact satisfy these conditions.

⁴In addition, as argued in Prince 1981a and Ward 1985, the Topicalization must effect the instantiation of a salient open proposition presupposed in the discourse. This is not directly relevant to the present paper and hence will not be discussed.

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