

**Signalling Importance in Spoken Narratives:  
The Cataphoric Use of the Indefinite This**

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In every narrative, many nouns are introduced. These can be participants, settings, props, and so forth. Once introduced, some of these people, places, or things play a pivotal role in the subsequent narrative; others, once introduced, are never to be mentioned again. Those people, places, or things that are mentioned more frequently we consider more topical (Givon, 1983), foregrounded (Chafe, 1974), or focused (Grosz, 1981). Those that are mentioned less often we think of as being supporting characters, backgrounded, or less focused.

While appreciating these distinctions, we assume that they map onto one psychological dimension: importance. Presumably concepts that are topical, foregrounded, or focused are perceived (by both the speaker and the listener) as being more important than concepts that are more peripheral, backgrounded, or less focused.

We also assume that discourse situations, like the telling of oral narratives, involve a functional exchange between speakers and listeners. Speakers use certain devices -- such as topicalization, foregrounding, and focus -- to convey certain properties -- such as importance. Presumably, on the receiving end, listeners are sensitive to these devices.

In this paper we explore one such device. It is the use of the unstressed, indefinite article this to introduce new noun phrases. We suggest that speakers use the indefinite this to signal their listeners that specific nouns are going to play a pivotal role in the upcoming discourse.

Furthermore, we also suggest that the indefinite this operates as a cataphoric device to increase the concepts' accessibility in the listeners' mental representations. We envision cataphoric devices as complements to anaphoric devices; whereas anaphoric devices (e.g., pronouns, repeated noun phrases, and the like) enable access to previously mentioned concepts, we suggest that cataphoric devices improve access to subsequently mentioned concepts. We will have more to say about how these devices might work later. But before we do, we shall further describe the cataphoric device that we studied in the present research.

**The Indefinite This**

Most of us are familiar with the indefinite article this; for example, it's typically used to introduce concepts in jokes, as in, "So this man walks into a bar" or "So a man walks into a bar with this parrot on his shoulder."

The indefinite this is interesting for a couple of reasons. First, it's a relative newcomer to English; Wald (1983) suggests that its use dates back only to the late 1930s. Second, the indefinite this occurs considerably more frequently in informal, spoken, dialects than formal or written ones, although many prescriptive grammarians dictate that it's unacceptable in any dialect (Prince, 1981).

The indefinite this shouldn't be confused with the deictic this ("Look at this") or stressed this ("I want this one"). In contrast to the unstressed, indefinite this, the deictic and stressed this are definite (Perlman, 1969). According to Prince (1981), the classic test of indefiniteness is occurrence in the existential-there construction. As (1) through (3) demonstrate below, the indefinite article this and the indefinite article a/an pass this test, whereas the definite article the fails.

- (1) There was this guy in my class last quarter.
- (2) There was a guy in my class last quarter.
- (3) \*There was the guy in my class last quarter.

By definition, the indefinite this -- like the indefinite a/an -- is used to introduce new concepts into a discourse.<sup>1</sup> Of the 243 occurrences of the indefinite this that Prince (1981) observed in Terkel's (1974) book, Working, 242 introduced a new concept, and the only exception was arguably introducing the same lexical form but with a different referent.

But more interestingly, in 209 of the 242 occurrences that Prince (1981) observed, the noun introduced with the indefinite this was referred to again, and as Prince said, "within the next few clauses". Wright and Givon (1987) quantified this observation more explicitly. They recorded eight- and ten-year olds telling one another informal stories and jokes. Wright and Givon found that when the children introduced nouns with the indefinite this, they referred to those nouns an average of 5.32 times in the subsequent 10 clauses that they produced; in contrast, when the children introduced nouns with the indefinite a, they referred to those nouns an average of only .68 times in the next 10 clauses. These data suggest that speakers use the indefinite this to introduce new concepts that are going to play a pivotal role in the subsequent narrative. Thus, the indefinite this serves as a cataphoric signal of importance.

### Research Question

Our question in this research was whether listeners are sensitive to this cataphoric device. That is, does introducing a concept with the indefinite this, as opposed to the more typical indefinite a, increase that concepts' accessibility in the listener's mental representation?

To answer this question, we conducted the following experiment. We auditorily presented several informal narratives to native English speaking subjects. We told our subjects that at some point in each narrative the narrator would stop talking; when this happened, it was the subjects' job to continue telling the narrative. We constructed our narratives so that the last clause of each introduced a new noun phrase. We will refer to these nouns as "critical" nouns. We manipulated whether each critical noun was introduced by the indefinite this or the indefinite a. Below is an example of one of the narratives we constructed:

I went to the coast last weekend with Sally. We'd checked the tide schedule 'n we'd planned to arrive at low-tide - 'cuz I just love beachcombin'. Right off, I found 3 whole sandollars. So then I started lookin' for agates, but I couldn't find any. Sally was pretty busy too. She found this/an egg ...

We proposed that accessibility would be manifested in our subjects' continuations in three ways: Frequency of Mention, Immediacy of Mention, and Referential Markedness. By Frequency of Mention we simply meant how frequently the subjects referred to the critical nouns. Presumably, the more accessible the concept was in the subjects' mental representations, the more frequently they would talk about it.

By Immediacy of Mention we meant whether the subjects would mention the critical noun in the first clauses that they produced. Presumably, the more accessible the concept was in the subjects' mental representations, the more likely they would be to mention it immediately (Gernsbacher & Hargreaves, 1988).

By Referential Markedness we meant how likely it was that subjects would refer to the critical nouns with more marked forms of reference, such as noun phrases, versus less marked forms, such as anaphoric pronouns. Several psycholinguists and linguists have shown that speakers' preferences for referential markedness is inversely related to their intended focus or topicality (Fletcher, 1984; Givon, 1985; Marslen-Wilson, Levy, & Tyler, 1982; Sidner, 1983). That is, speakers use less marked forms (e.g., zero anaphora and pronouns) for more focused or topical concepts. Similarly, we proposed that our subjects would use less marked forms for more accessible concepts. In other words, the more accessible the concept, the more likely the subjects would refer to it with a less marked form of reference. Our methodology and results are described more fully below.

### Experimental Methods

Our subjects were 45 undergraduates at the University of Oregon who participated as one means of fulfilling a course requirement. All were native American English speakers.

Our materials were 20 experimental and 4 filler narratives. They ranged in length from 57 to 153 words with an average length of 93.7 words. All the narratives were written in a very informal, conversational dialect. The 20 experimental narratives were randomly ordered and intermixed with the 4 filler narratives. The purpose of the filler narratives was to disguise the occurrence of so many this-introduced noun phrases in the final clauses of the experimental narratives.

All 24 narratives were recorded by a college-aged male who we kept naive to the experimental hypotheses. Our narrator recorded two tapes: On one tape, half the experimental narratives were recorded in their this-introduced form, while the other half were recorded in their a-introduced form. On the other tape, the reverse was true. One indication of our narrator's naivete was that he inadvertently recorded two of the experimental narratives in their this form on both tapes. Although we didn't realize this mistake until after collecting the data, we dropped these two narratives from our analyses.

During the experiment, each subject sat in a sound proof room. The subject listened to our recorded narratives, as well as our instructions, over a set of headphones. The subjects were told that they would hear the beginnings of twenty-four stories and that they should complete them as they felt the narrator of the stories would have done. At the end of each narrative, the subjects were given 20 seconds to tell their continuation. When the 20 seconds were up, the subjects heard a single tone. They were to stop talking then if that was convenient, but if it wasn't, they could continue for an additional ten seconds, at which time they heard two tones. After the two tones, they were then given a

fifteen second break before the next narrative began. To get accustomed to the experimental task, the subjects first practiced on two narratives.

### Experimental Results

Each subject's continuations of the experimental narratives were transcribed according to the methods of Ochs (1979). In these transcriptions, clause boundaries were marked on the basis of finite verbs and intonation groups (Chafe, 1980). Two judges scored the transcripts blind to both the subjects' identities and the narratives' experimental condition, (i.e., whether the critical nouns were introduced with this versus a).

**Frequency of Mention.** We first measured how frequently subjects mentioned the critical nouns. When the critical nouns were introduced with the indefinite this, subjects mentioned the nouns in 22% of the clauses that they produced; in contrast, when the critical nouns were introduced with the indefinite a, subjects mentioned the nouns in only 16% of the clauses they produced. This difference was statistically reliable,  $t(1,17) = 2.312, p < .03$ .<sup>2</sup> In fact, in 17 of the 18 narratives we observed the expected difference (i.e., subjects more frequently mentioned the critical nouns when they were introduced with this versus a).

As an illustration, below is Subject #03's continuation for the same narrative that we presented as an example above. This subject heard the narrative with the critical noun egg introduced with the indefinite this. As illustrated in his continuation, this subject frequently refers to the critical noun.

'N it looked like it came from a lizard or something or maybe a turtle, but we couldn't tell if it had hatched or not so we put it back where we found it just in case it was still alive

In contrast, below is Subject #30's continuation for the same narrative, but Subject 30 heard the narrative with the critical noun egg introduced with the indefinite a.

But what I really wanted to find was a whole crab shell. Y'know you can hardly ever find those. You always find just bits and pieces. It's like someone deliberately comes up 'n crunches 'em all before 'ya get there or somethin'. But, beachcomin's a favorite thing, even if I don't find any crab shells.

**Immediacy of Mention.** The second property that we measured from our subjects' continuations was their likelihood of mentioning the critical noun in the first clause that they produced. When the critical nouns were introduced with the indefinite this, subjects mentioned those nouns in 46% of the first clauses of their continuations; in contrast, when the critical nouns were introduced with the indefinite a, subjects mentioned those nouns in only 37% of their first clauses. This difference was also statistically reliable,  $t(1,17) = 2.03, p < .055$ . In fact, we observed this expected difference in 15 of the 18 experimental narratives.

**Referential Markedness.** Our third measure was the subjects' choice of referent for the critical nouns. To quantify this effect, we attended only to those continuations where subjects did in fact refer to the critical nouns. And in those continuations, we attended only to the subjects' first reference to the critical nouns. There were a total of 533 of these first references; 376 were pronouns (the less marked form of reference)

and 177 were noun phrases (the more marked form of reference). Of the 376 pronouns, 57% were references to this-introduced critical nouns, and the remaining 43% were references to a-introduced critical nouns. Thus, subjects were more likely to select the less marked form of reference to refer to this-introduced critical nouns. The opposite pattern emerged with the noun phrases (the more marked form of reference). Of the 177 noun phrases, 54% were references to critical nouns that had been introduced with a, and the remaining 46% were references to critical nouns that had been introduced with this. Thus, subjects were more likely to select the more marked form of reference to refer to a-introduced critical nouns. This association was statistically different from what would be expected by chance,  $X^2(1) = 6.014, p < .013$ .

Finally, we also encountered a rather interesting datum. A small proportion of the time (2.83%), subjects committed what we will refer to as a "switch." In the narrative they heard, the critical noun was introduced with the indefinite this, but when they first mentioned the noun, they switched the this to an a. Or conversely, they heard the critical noun introduced with the indefinite a, but they switched the a to a this. We found that switching this to a was very rare. That situation occurred on only 13% of the switches (or .388% of the continuations). In contrast, switching a to this occurred significantly more often; that situation accounted for 87% of all the switches (or 2.44% of the continuations),  $t(1,17) = 3.578, p < .002$ . What this pattern suggested to us was that subjects felt that they had to signal importance with the indefinite this before they could focus, foreground, topicalize or otherwise elaborate on the nouns in their own continuations.

### Conclusions

To summarize our results, we found that our introducing noun phrases by the indefinite this versus the indefinite a greatly affected our subjects' continuations: When the critical nouns were introduced with this, subjects mentioned the nouns more frequently, often within the first clauses that they produced, and typically via pronouns. In contrast, when the critical nouns were introduced with a, subjects mentioned the nouns less frequently, and typically via full noun phrases.

These data suggest that listeners are indeed sensitive to the rapidly developing use of the indefinite this to signal potentially important information. Concepts introduced by a speaker with the indefinite this are more accessible to the listener. In this way, the indefinite this appears to be operating as what we are calling a cataphoric device.

Indeed, Prince (1981) has suggested that the indefinite this parallels a device in American Sign Language in which a signer establishes an absent third person on his or her right so that the signer might later refer to that individual; an absent third person who is not intended to be subsequently referred to is not established this way. Clearly, this ASL device is also operating cataphorically.

Another device that might work cataphorically in spoken English is intonation (or spoken stress). Cutler (1976) found that initial phonemes were recognized faster when they began words that carried their sentences' stress (see also Shields, McHugh, & Martin, 1974). Cutler (1976) also found that it wasn't just the improved acoustic quality that effected this advantage: She found the same results when she exchanged (by tape splicing) the stressed word with the same word from an unstressed environment. In other

words, it was the intonation contour that directed the listeners toward the stressed items.

Similarly, Bock and Mazzella (1983) found that stressing the word Arnold in a sentence such as,

(4) Arnold didn't fix the radio.

as opposed to the word fix, made it easier for listeners to understand a subsequent sentence like

(5) Doris fixed the radio.

So both Cutler's (1976) and Bock and Mazzella's (1983) studies suggest that intonation signals information focus, or what we have been calling importance. Thus, intonation seems like a good candidate for a cataphoric device.

How do cataphoric devices work? That is, what are the mental processes underlying our suggestion that cataphoric devices increase their concepts' accessibility in listeners' mental representations? One hypothesis is based on some of our recent findings concerning how anaphoric devices work (Gernsbacher, 1988). We have found that anaphoric devices (e.g., pronouns, repeated noun phrases, and the like) enable access to previously mentioned concepts via two mechanisms: Enhancement, which increases the activation level of the rementioned concept's mental representation, and Suppression, which decreases or dampens the activation of other concepts' representations. The net effect of both mechanisms is that the anaphorically mentioned concept is activated at a different level than other concepts.

Similarly, we suggest that cataphoric devices may use either or both of these two mechanisms. That is, a cataphoric device may improve its concept's accessibility by enhancing the mental representation of that concept. Or a cataphoric device may improve its concept's accessibility by suppressing the activation of other concepts. We are excited about empirically exploring these possibilities.

#### Footnotes

<sup>1</sup>A few culturally shared or contextually unique concepts are introduced with a definite article, for example the sun, the President, or "I walked into the house and the stereo was blaring" (Chafe, 1987; Clark & Marshall, 1981, Givon, 1986).

<sup>2</sup>Our statistical analyses treated the 18 experimental narratives, or more technically the 18 critical nouns introduced in the 18 experimental narratives, as our units of analysis. This approach is more conservative than the typical subject-based analyses (Clark, 1973).

#### References

- Bock, J.K., & Mazella, J.R. (1983). Intonational marking of given and new information: Some consequences for comprehension. *Memory & Cognition*, *11*, 64-76.
- Chafe, W. (1974). Language and consciousness. *Language*, *50*, 111-133.
- Chafe, W. (1980). (Ed). *The pear stories: Cognitive cultural, and linguistic aspects of narrative production*. Norwood, NJ: Ablex.
- Clark, H.H. (1973). The language as a fixed-effect-falacy: A critique of language statistics in psychological research. *Journal of Verbal Learning and Verbal Behavior*, *12*, 335-359.

- Clark, H.H., & Marshall, C.R. (1981). Definite reference and mutual knowledge. In A. Joshi, B. Webber, & I. Sag (Eds.), Elements of discourse understanding (pp. 10-63). Cambridge: Cambridge University Press.
- Cutler, A. (1976). Phoneme-monitoring reaction time as a function of preceding intonation contour. Perception & Psychophysics, 20, 55-60.
- Fletcher, C. R. (1984). Markedness and topic continuity in discourse processing. Journal of Verbal Learning and Verbal Behavior, 23, 487-493.
- Gernsbacher, M.A., & Hargreaves, D. (1988). Accessing sentence participants: The advantage of first mention. Journal of Memory and Language, in press.
- Givon, T. (Ed.) (1983). Topic continuity in discourse: A quantitative cross-language study. Amsterdam: J. Benjamins.
- Givon, T. (1985). The pragmatics of referentiality. In D. Schiffrin (Ed.), Meaning, form, and use in context. Washington, DC: Georgetown University Press.
- Grosz, B. (1981). Focusing and description in natural language dialogs. In A. Joshi, B. Webber, & I. Sag (Eds.), Elements of discourse understanding (pp. 84-105). Cambridge: Cambridge University Press.
- Marslen-Wilson, W., Levy, E., & Tyler, L. K. (1982). Producing interpretable discourse: The establishment and maintenance of reference. In R.J. Jarvella & W. Klein (Eds.), Speech, place and action (pp. 339-378). Chichester: Wiley.
- Perlman, A. (1969). 'This' as a third article in American English. American Speech, 44, 76-80.
- Prince, E. (1981). On the inferencing of indefinite-this NPs. In A. Joshi, B. Webber, & I. Sag (Eds.), Elements of discourse understanding (pp. 231-250). Cambridge: Cambridge University Press.
- Shields, J.L., McHugh, A., & Martin, G. (1974). Reaction time to phoneme targets as a function of rhythmic cues in continuous speech. Journal of Experimental Psychology, 102, 250-255.
- Wald, B. (1983). Referents and topic within and across discourse units: Observations from current vernacular English. In S. Kelien-Andreu (Ed.), Discourse perspectives on syntax (pp. 91-116). New York: Academic Press.
- Wright, S., & Givon, T. (1987). The pragmatics of indefinite reference: Quantified text-based studies. Studies in Language, 11, 1-33.

Acknowledgments. This work was supported by National Science Foundation grant BNS 85-10096. We thank Carrie Clarke and Kathy Varner for their help in transcribing the subjects' continuations, and Ellen Galloway for her help in testing the subjects. Please address correspondence to Dr. M.A. Gernsbacher, Department of Psychology, University of Oregon, Eugene, OR 97403-1227.