

## Accenting on Pronouns and Proper Names in Spontaneous Narrative\*

Christine Nakatani

Aiken Computation Laboratory, Harvard University  
33 Oxford St., Cambridge, MA 02138, USA  
Email: chn@das.harvard.edu

### ABSTRACT

This paper reports empirical findings on discourse factors affecting the accentuation of pronouns and proper names. We account for the distributions of accent on referring expressions in a narrative sample by proposing a discourse constraint on the interpretation of accent function. Empirical support for this view is presented based on analysis of the discourse functions of accented subject pronouns within the framework of CENTERING THEORY.

### INTRODUCTION

In this paper, we account for the distributions of accentuation patterns on pronouns and proper names in a spontaneous narrative. Our account relates the separate but interacting contributions of linguistic form, grammatical position and discourse structure within the framework of CENTERING THEORY.

Previous prosody research has identified GIVEN/NEW information status as an important but not sole predictor of accentuation of referring expressions in elicited spontaneous speech (Brown 1983, Terken 1984). Other factors affecting accentuation include grammatical function and surface position (Terken and Hirschberg 1992) and TOPIC or DISCOURSE STRUCTURE (Brown 1983, Fuchs 1984, Terken and Nootboom 1987, Hirschberg 1991, *inter alia*). Our account of the accenting patterns on pronouns and proper names integrates several of these factors in a novel interpretation of the discourse function of accent.

### THE NARRATIVE STUDY

For the narrative study, 481 noun phrase referring expressions in a 20 minute long, American English spontaneous narrative<sup>1</sup> were analyzed for accentuation, grammatical function (e.g. subject, direct object, object of preposition), and form of referring expression (e.g. proper name, pronoun, definite/indefinite noun phrase). Previous research has shown there is a general tendency for GIVEN information to be accented and NEW information to be unaccented (Brown 1983, Terken 1984). It is also generally thought to be the case that the information status of pronoun referents is GIVEN, and the information status of proper

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\*This work was partially supported by a National Science Foundation (NSF) Graduate Research Fellowship and NSF Grant No. 447557525 at Harvard University. The author thanks Barbara Grosz, Julia Hirschberg and Mark Liberman for helpful comments.

<sup>1</sup>The narrative was collected by Virginia Merlini for the purpose of studying American gay male speech and was made available by Mark Liberman at the University of Pennsylvania Phonetics Laboratory.

names is NEW. (But see Discussion section). Finally, there is a general tendency for grammatical subjects to represent GIVEN (DISCOURSE-OLD) information and grammatical direct objects, NEW (DISCOURSE-NEW) information (Prince 1988). Our study considers the role of accentuation in relation to grammatical position and form of referring expression.

## RESULTS

Overall results shown in Table 1 support the hypothesis that NEW information is generally accented and GIVEN information generally unaccented. Although this trend is significant ( $p < .001$ ,  $\chi^2 = 112$ ,  $df = 1$ ), the accentuation on 19% of the narrative's 294 pronouns and proper names is not consistent with the information status thought to be conveyed by the form of the referring expression itself. These overall results are broken down by grammatical function in Table 2 and Table 3. We conclude that there exist two major non-

Table 1: Accenting on all pronouns and proper names

	Accented	Unaccented
Proper names (n=135)	81%	19%
Pronouns (n=159)	19%	81%

Table 2: Accenting of pronouns and proper names in SUBJECT position

	Accented	Unaccented
SUBJECT proper names (n=55)	48	7
SUBJECT pronouns (n=111)	25	86

Table 3: Accenting of pronouns and proper names in DIRECT OBJECT position

	Accented	Unaccented
DIRECT OBJECT proper names (n=22)	11	11
DIRECT OBJECT pronouns (n=15)	1	14

anomalous linguistic categories of referring expressions whose distributions in naturally occurring discourse need to be accounted for: accented subject pronouns and unaccented object proper names. Below, we present an initial account of these distributional data and then examine the discourse functions of the former class in greater detail.

## AN ACCOUNT OF THE ROLE OF ACCENTUATION

The data reported above can be explained by the following constraint: If grammatical function and form of referring expression convey conflicting GIVEN/NEW statuses, then accentuation must "reinforce", or agree with the GIVEN/NEW status conveyed by the form of referring expression. A corollary of this hypothesis is that for the cases where a referring expression of a certain form is realized as its preferred grammatical function (e.g. pronouns as subjects, proper names as non-subjects), the speaker is free to use accenting to convey linguistic information apart from GIVEN/NEW status, such as topic shift, emphasis or contrast.

To test the above corollary, we analyzed the 25 cases of accented subject pronouns and determined the possible discourse functions served by accentuation. We found six

cases of emphasis or contrast and three cases requiring limited inference to determine the pronoun referent.

The remaining cases can be viewed within the framework of CENTERING THEORY (Sidner 1979, Joshi and Weinstein 1981, Grosz et al. 1983, Grosz and Sidner 1986) as falling into two major classes. For one class (seven cases), accentuation accompanied a GLOBAL shift in discourse context and signaled reference to a previous discourse CENTER that was not salient in the immediate discourse context. Accented pronouns signaling global shifts occurred as the first grammatical subject following the completion of an embedded discourse segment.<sup>2</sup> Also, the pronoun referent crucially was not realized in the immediately preceding utterance for these cases. For the other class (nine cases), accentuation marked a LOCAL shift in attention away from the current discourse CENTER to a new discourse entity that was indeed salient in the immediate discourse context. In contrast to the first class, the pronoun referent always occurred in the immediately preceding utterance, but never as the BACKWARD-LOOKING CENTER.

Figure 1: Examples of accented pronouns (in capitals) signaling local and global shifts in attention

*so Masson became the new curator –  
he flies to london and – you know –  
he's already met Anna Freud and therefore  
he has access to the secret cupboard of Freudian letters jin jin jin jin jin jin  
and naturally Anna assumed that uh –*

*SHE was a brilliant woman too –  
she did more a lot of work in child psy- psychiatry and psycho-  
analysis*

*assumed that HE would keep this information  
you know within the confines of the psychoanalytical group  
well as Masson was studying these letters he realized ...*

In Figure 1, the first accented pronoun, *SHE*, illustrates a local shift establishing *Anna Freud* as the CENTER of the embedded subsegment. The second accented pronoun, *HE*, marks a global shift in attention back to the outer segment. This accented pronoun realizes the previously established CENTER of the outer segment, namely *Masson*.

## DISCUSSION

This study furthers our understanding of discourse factors affecting accentuation for the genre of spontaneous narrative (cf. Altenberg 1987). Related hypotheses have been put forth to explain why GIVEN information may be accented. For example, Hirschberg 1991 notes that the accenting of GIVEN proper names in a large speech corpus can be explained by the proposal by Sanford et al. 1988 that proper names may be used to “refocus” the speaker’s attention on previously established discourse entities that lack prominence in the immediate discourse context. Our study builds upon these previous

<sup>2</sup>Segmental structure was determined by the author using speaker intention, cue phrases, and referring expressions as discourse structure cues (cf. Hirschberg and Grosz 1992). Cue words signaled segment pops in five out of the seven cases of global shift.

findings in two ways. First, we found that accentuation on *pronouns* can cue similar shifts in attention, suggesting that accentuation cannot simply be associated with form of referring expression but rather makes an independent contribution to the structuring of information in discourse. Second, the distinction between LOCAL and GLOBAL shifts in attention makes precise two different notions of lack of discourse prominence in terms of discourse structural properties: roughly, LOCAL shifts occur at the initiation of subsegments and GLOBAL shifts occur at the closing of embedded segments.

We conclude that principles describing the discourse role assigned to accentuation must be sensitive to interactions between grammatical function and form of referring expression, and must incorporate notions of discourse structure to account for two distinctive classes of accented pronouns at discourse segment boundaries. Analysis of other kinds of referring expressions is needed to further test the proposed discourse constraint on accentuation and to refine our understanding of the interaction of accentuation and structural properties of discourse.

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