Pronouns Without Explicit Antecedents: How do We Know When a Pronoun is Referential?

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Abstract

Pronouns without explicit noun phrase antecedents pose a problem for any theory of reference resolution. We report here on an empirical study of such pronouns in the Santa Barbara Corpus of Spoken American English, a corpus of spontaneous, casual conversation. Analysis of 2,046 third person personal pronouns in fourteen transcripts indicates that 330 (or 16.1%) lack NP antecedents. These pronouns fall into a variety of subtypes. 88 refer to entities that are inferable from an activated frame or script, or are otherwise easily accommodated. In 110 cases, *it* could refer to a fact, proposition event, activity, situation, or reason which has been evoked by a previous non-NP. 92 cases of *it* were classified as pleonastic. In this paper we focus on some problematic subclasses of pronouns which could be analyzed as either referring to entities of various degrees of abstractness that were introduced by or implied in previous discourse, or as non-referential, including pleonastic. Such cases include possible truncated cleft pronouns, possible truncated extraposition pronouns, and certain non-specific uses of *they*.

1. Introduction

The referent of prototypical pronoun has been recently introduced into the discourse by a noun phrase, i.e. the pronoun has an explicit noun phrase 'antecedent', as in (1):

(1) a. My neighbor's Bull Mastiff bit a girl on a bike.
 b. **It**'s the same dog that bit Mary Ben last summer. (Gundel et al., 1993)

It is well known, however, that such an antecedent is neither necessary nor sufficient for appropriate pronoun use, especially in the case of personal pronouns. Examples like (2) show that use of *it* is not always acceptable even when there is a recent NP antecedent:

(2) a. Sears delivered new siding to my neighbors with the Bull Mastiff.
 b. #**It**'s the same dog that bit Mary Ben last summer. (Gundel, et al., 1993)

Moreover, an NP antecedent, or an explicit antecedent of any sort, is not always necessary, a fact which poses problems for any theory of reference resolution (see Cornish 1999, Gundel, Hedberg and Zacharski 2000, Byron 2000, inter alia).

We report here on an empirical study of pronouns without NP antecedents in the Santa Barbara Corpus of Spoken of American English, a corpus of spontaneous, casual conversation. Particular attention will be paid to cases where it isn't clear whether the pronoun refers to a specific fact, situation, proposition, etc. or whether it is the subject of a truncated cleft (Hedberg 2000), a truncated extraposition construction, or is otherwise possibly non-referential.

2. Methodology

As mentioned above, we obtained our data from the Santa Barbara Corpus of Spoken American English Part-1 (DuBois, et al., 2000). We analyzed the first 790 intonation units in each of 14 transcripts, ranging from 571 to 1493 seconds. The transcripts represent conversations between two to six speakers in a variety of settings. For example one conversation took place when the three participants were preparing a dinner, another took place at a birthday party, and a third was a classroom discussion.

2.1. Coding

We coded each of the 2,046 third-person personal pronouns (excluding false starts) in the corpus for whether or not it had an NP antecedent. Pronouns without NP antecedents were further classified as clearly pleonastic (i.e. lacking a referent), possibly pleonastic, or referential; and referential pronouns were classified into type of referent (e.g. proposition, fact, activity, reason) introduced by a non-NP or as an inferrable. We now turn to a brief introduction of each of these categories.

2.1.1. Inferrables

In (3), the referent of the pronoun is an example of what Prince (1981) calls an 'inferrable,' Hawkins (1978, 1991) calls an 'associative anaphor', and what Erku & Gundel (1987) and Gundel, Hedberg & Zacharski (2000) call an 'indirect anaphor.' The referent of the pronoun hasn't been explicitly mentioned in the discourse. Rather,

the addressee has to infer from mention of the kids across the street that *she* refers to their mother.

(3) [Talking about how the kids across the street threw paint in their yard.] Those kids are just – And **she**'s pregnant with another one. (2.294)

Most of the inferrables have what Cornish (1999) calls an 'antecedent trigger'. For example, in (3) the antecedent trigger for the inferrable *she* is *the kids*. There are a variety of relations between the antecedent trigger and the inferrable pronoun, including specific entity to generic kind, generic kind to set of specific entities, individual to couple, or individual to group (c.f. the "poset" relations of Hirschberg 1991). In (4), for example, the antecedent trigger is *Trish* and the inferrable makes reference to the couple, Trish and her husband.

(4) A: Was it Trish who told me she was pregnant?
     B: She looked really good. Where are **they** going to church? (13.221)

Similarly, in (5) the antecedent trigger is the name of the musical group Oba Oba. Existence of the concert can be inferred from mention of the group.

(5) We went to see Oba Oba. You know. Ruben loved **it**. (6.157)

Other examples include discussion of filing a police report to *they* referring to the police, or from discussion of a class to *he* referring to the teacher. In some of these cases, it is plausible to assume that the referent is inferred from an activated frame or script, such as a classroom script that includes the information that a classroom has a teacher.

In a few cases, the referent of the inferrable pronoun can be assumed to be in the focus of the addressee's attention at the time it is uttered, for example in (6):

(6) A: Where is that salad spinner? Here it is.
     B: And possibly the most spurious device ever created.
     A: Oh I think **they**'re great. (3.155)

It is reasonable that reference to a particular salad spinner will bring into focus a representation of the generic kind of salad spinners, especially in this context, where speaker B makes a generic statement about salad spinners.

It is more common, however, for the addressee to have to 'accommodate' the referent. In (4), for example, it isn't reasonable to assume that mention of Trish would automatically bring into focus a representation of Trish and her husband. In such cases, use of the form constitutes a minor violation of the condition on appropriate use of unstressed pronominals that their referent be 'in focus' (Gundel, Hedberg, & Zacharski, 1993), but the addressee is able to repair the violation and figure out what the referent is. Gundel, et al. (2000) point out that pronominal inferrables are for the most part restricted to casual, unplanned discourse, a factor which supports the hypothesis that accommodation is involved in their processing.

Whether they are in focus or not, these examples are referential, and their reference must be resolved in order for full interpretation to take place. In accommodation cases, the inferential process required for resolution relies solely on general pragmatic principles.

Finally, in Section 3 below, we will discuss the possibility that some inferrable pronouns might not be referential at all.

2.1.2. Facts and Propositions

Events, as well as facts, propositions, situations and other 'higher-order' entities are often introduced into discourse by non-nominal constituents like clauses, sequences of clauses and verb phrases. Previous work has found that it is more common for such entities to be referenced by a demonstrative pronoun than by a personal pronoun. For example, Webber (1991) found that only 15 out of 96 (or 15.6%) pronominal references to clausally introduced material in written English were made using the personal pronoun *it* as opposed to a demonstrative pronominal *that* or *this*. Hegarty, Gundel, & Borthen (2002), in a study of both spoken and written texts, reached an almost identical result, finding that only 15 out of 95 references to entities introduced by expressions larger than a noun phrase were made with *it* as opposed to *this* or *that*.

Hegarty et al. (2002) suggest that the theory of referential expression choice of Gundel, et al. (1993) can explain these figures if it is assumed, as is plausible, that material introduced in clauses or sequences of clauses is activated, but is much less likely to be brought into focus than material introduced in syntactically prominent noun phrases.

Hegarty et al. further suggest that one factor determining whether a clausally introduced entity is brought into focus, and is therefore available to immediately subsequent referent with *it*, is its degree of 'world immanence' (Asher, 1993). According to Asher, eventualities (states, activities and events) have a relatively high degree of world immanence, since such entities have spatiotemporal location and causal efficacy, while propositions are at the other end of the spectrum in lacking these properties. Facts and situations are in between. Notice the following examples illustrating Hegarty et al.'s observation:

(7) John insulted the ambassador. **It/that** happened at noon.
(8) John insulted the ambassador. ??**It/that/this** was intolerable to the embassy.

The pronoun in (7) refers to the event of John insulting the ambassador, and the pronoun in (8) refers to the situation of John's insulting the ambassador.

Finally, facts and propositions pattern more closely with situations, as shown in (9) and (10), from Hegarty et al. 2002.

(9) A: I read somewhere that the poodle is one of the most intelligent dogs around.
     B: well uhm. . I definitely wouldn't dispute **that**. (Switchboard Corpus, Dialog 2019)
     B': ?? well uhm. . I definitely wouldn't dispute **it**.

(10) a. "We believe her, the court does not, and **that** resolves the matter," Mr. Montanarelli said today

of Ms. Lewinsky's testimony that… (NY Times, 5/24/00)

b. "We believe her, the court does not, and **it** resolves the matter," Mr. Montanarelli said today of Ms. Lewinsky's testimony that…

The personal pronoun in (10b) would be taken as referring to the court rather than to the complex fact introduced in the preceding two clauses.

Our data support the claim that facts and propositions, which have low world immanence, are rarely brought into focus by non-nominals and so are rarely referenced with *it*. Only 16 pronouns in our data (0.78% of the total pronouns) were coded as referring to facts and propositions, and few if any of these were clear cases.

The most convincing ones are shown in (11)-(13). In (11), the speaker is saying that the fact that Chicanos don't vote in great numbers [compared to other Americans] and that Americans don't vote in great numbers [compared to people in other countries] is a 'double whammy.'

(11) ... Chicanos do not vote in great numbers. And we don't participate in many organizations in great numbers.. . .I don't care if you're African-American, …I don't care if you're Asian- American, . . . and I don't care if you're Latino, or whatever. . . . Most Americans, . . . do not vote, . . . in great numbers. . . . So, . . **it**'s a double whammy. (12.1026)

In (12) the speaker is suggesting that they check out the proposition that the measuring cup is unbreakable. In (13) the speaker is saying that the proposition that they approve the loan request is moved and seconded.

(12) Wendy: . . . Yes. Microwavable, chef. Eight ounce measuring cup. Is virtually unbreakable.
Kevin: Virtually, let's find out.
Kendra: Let's check **it** out. (13.551)

(13) Joe: I am moving that we approve this loan request
(about three minutes of discussion)
Fred: I second then Joe . . .
Joe: So **it**'s moved and seconded . . to uh . . (14.415)

Note that in all three cases, there are other reasons to expect that the fact or proposition may be in focus as it has been mentioned overtly or covertly, more than once.

Finally, there was one case that we classified as a reason, shown in (14):

(14) A. Guess kids' bones, just like .. grow back really fast.
B. Mhm.
C: Yeah. I think they're really soft to start with.
A: They're made of rubber. … That's **it**. (2.77)

Here, the speaker is saying that kids' bones being made of rubber is the reason for them growing back really fast. As will be discussed in Section 3 below, some of the pronouns that could be coded as referring to reasons might also be classified as non-referential pleonastic pronouns, namely those that occur as the subject of a truncated cleft sentence.

2.1.3. Activities, events and situations

The higher world immanence of eventualities such as events, activities, and states, should make them more accessible to reference with a personal pronoun. Indeed, references to activities, events and situations were more prevalent in our data than references to facts and propositions, although it wasn't easy to tell activities, events and situations apart in all cases. It seems clear, however, that in (15), the speaker is saying that the activity of doing the translations needs to be worth her time.

(15) I'm going to do some translations for her and stuff? And um, you know, I have to make at least 50 dollars or so, to make **it** worth my time. (7.323)

In (16), it is the event of the speaker having thrown green pepper down the addressee's blouse that he thought was funny.

(16) I threw a green pepper down your blouse. … (SNIFF) .. I thought **it** was funny. (3.384).

Events differ from activities in that their referent is evoked by a whole prior sentence, not just a verb phrase. However, as mentioned, the distinction is not always a clear one.

In (17), the speaker is saying that she was into the situation of the car thief showing television viewers how not to get their car broken into.

(17) He's gonna show us, you know, how not to protect your car, not to get it, you know, ripped off man. Cause, you know, I -- . , yeah, I was into **it**. (6.31)

Situations differ from events in our data in typically being introduced by a wider stretch of discourse than a single clause. The situation referred to by the pronoun in (17), for example, is evoked by a wide expanse of prior discourse. Again the distinction is not always clear. Some of the entities that we coded as situations might better be coded as complex events or states.

2.1.4. Pleonastics

We coded for three types of pleonastic pronouns: cleft pronouns, extraposition pronouns and atmospheric pronouns, as exemplified in (18)-(20):

(18) Was **it** Trich who told me she was pregnant? (13.216)

(19) I just think **it**'s so damn weird we're here. (5.529)

(20) **It** rained during the dry season. (3.526)

In Section 3 below, we discuss three types of cases in which it is not clear whether a pronoun is pleonastic or refers to an entity such as a reason, cause, situation or event.

2.2. Results

The results of our corpus study are shown in Table 1, which presents the total number of pronouns with each type of referent, if any, and also shows a few cases that

weren't included in the primary classification because they were exophoric, included in an idiom such as "God damn it" or had indeterminate reference.

	N	%
NP antecedent	1676	83.34
Inferrable	88	4.38
Non-NP antecedent	110	5.38
Pleonastic	92	4.50
Idiom	8	.40
Exophoric	18	.90
Indeterminate	14	0.70
Total	2046	100.00

Table 1: Pronouns in Santa Barbara Corpus

330 of the third person personal pronouns in the corpus, or 16.1%, lacked NP antecedents. This figure can be compared to the percentages of pronouns without NP antecedents reported on in Byron (2002). As Byron notes, Eckert and Strube (2000) found that 22% of pronouns in a set of Switchboard dialogs had non-NP antecedents and that 33% lacked antecedents altogether; Byron and Allen (1998) found that 50% of pronouns in the TRAINS corpus lacked NP antecedents; and Botley (1996) found that 20% of pronouns in his corpus lacked NP antecedents In at least some of these cases, it can assumed that demonstrative pronouns were included in the study, so the total number of pronouns lacking NP antecedents can be expected to be higher than the figure we found since, as discussed above, demonstrative rather than personal pronouns are often used to refer to propositions, situations, and speech acts.

Table 2 breaks down the referential pronouns with non-NP antecedents into the type of referent.

	N	%
Fact	6	5.45
Proposition	10	9.09
Activity	27	24.55
Event	3	2.73
Situation	63	57.27
Reason	1	.91
Total	110	100.00

Table 2: Referential Pronouns with Non-NP Antecedents

We now turn to a discussion of the pronouns labeled 'pleonastic' in Table 1, arguing that their non-referential status in some cases is questionable.

3. Determining referentiality

As we performed the classification of the data in the corpus, we came to be particularly interested in examples of pronoun use that were difficult to classify as either clearly referential or clearly non-referential. There were three main types of such pronouns in the corpus.

3.1. Vague inferrables

Some inferrable pronouns lack a specific referent, though their interpretation is often restricted by a currently activated entity or frame. For example, in (21) and (22), *they* seems to refer to "people in general" and doesn't have a specific referent.[1]

(21) And **they** say that if there's six years between children, there's not that much rivalry. (7.1247)

(22) And **they** probably didn't have to wash their salads back then, because they didn't know what was on them. (3.165)

Reference resolution in such cases is not only difficult, but typically unnecessary. Thus as Gundel et al. (2000) point out, sentences like (21) can be replaced by agentless passives with no loss of information content, as in (23):

(23) It is said that if there's six years between children, there's not that much rivalry.

In (24), the phrase *they had* could be replaced *by there was* and the pronoun seems even more nonreferential than the type in (21) and (22):

(24) He said I didn't get done working until after nine. …Cause that five-car pile up **they** had between Hardin and Crow? (7.414)

There seems to be a continuum between clearly referential inferrables and nonreferential inferrables as reference proceeds, for example, from a specific woman across the street as in (3); to the people in the office, whoever they might be; to people in general as in (21), (22), and (24).

3.2. Truncated cleft pronouns

In (25), the sentence in B's reply is a truncated cleft. The cleft clause *who stole Hector's radio* has been elided.

(25) A: It's obvious now that this guy w- -- This was the one who stole .. Hector's [radio]. I mean, .. nobody came out and told you, guess what, I confess.
    B: Oh, we knew. .. We knew. .. We figured **it** had to be Michael. (2.70)

Hedberg (2000) presents a theory of cleft sentences that claims that cleft pronouns combine with the cleft clause to denote a discontinuous definite description. Cognitive-pragmatic conditions of use for this description are determined by where the description falls on the Givenness Hierarchy of Gundel, et al. (1993), with the cleft pronoun functioning as a determiner in a nontruncated cleft and as a pronoun in a truncated cleft. Thus the cleft clause material must be at least uniquely identifiable in a nontruncated *it*-cleft, familiar in a nontruncated *that*-cleft, activated in a nontruncated *this*-cleft, and in focus in a truncated *it*-cleft.

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[1] Byron (2000) suggests that such uses of *they* are type-identifiable but not referential on the Givenness Hierarchy (Gundel et al., 1993), and refer to some unspecified group of people.

In example (25) the material is in focus because the conversation has been about a car thief appearing on a television show who turns out to be Michael and also about the theft of Hector's radio. The one who stole Hector's radio has just been introduced in the previous contribution.

Hedberg claims that the cleft pronoun is not a meaningless, pleonastic element but rather is referential in the sense that a determiner is in the case of full clefts, and in the sense that at least some pronouns are in the case of truncated clefts. To understand in what sense the subject pronoun of a truncated cleft is referential, compare Hedberg's example in (26) with example (25).

(26) My heart beat fast, for I had thought that as the discoverer of the body I would be the first to be called; but to my surprise, **it** was Marcel.

Here, the truncated cleft could be replaced by a full cleft, *It was Marcel who was called.* Hedberg's claim is that the subject pronoun in the truncated cleft co-refers with *the first to be called*.

In both (25) and (26), the 'antecedent' for the pronoun has been introduced as the complement of an inverted pseudocleft. Thus, both (25) and (26) can be paraphrased as pseudoclefts: *We figured the one who stole Hector's radio had to be Michael; but to my surprise, the one who was called was Marcel.* The sentences here analyzed as truncated clefts could be analyzed, then, as pseudoclefts with pronominalized subjects, and the sense in which the subject is referential is the same as the sense in which the free relative subject of a pseudocleft is referential.

There are several examples of truncated clefts in the Santa Barbara corpus whose subjects we classified as pleonastics in Table 1 but which could equally well be classified as referring to a reason or a cause evoked in prior discourse. For example, (27) and (28):

(27) A: So that's why you're interested in death?
B: Maybe **it**'s because my parents were old? When I was young? (5.499)

(28) A: What do you think makes em look African?
B: … Their mustaches?
A: … Is **it** the way their little beard goes? (2.517)

Here again, the truncated cleft could be replaced by a full cleft: *Maybe it's because my parents were old that I am so interested in death*; *Is it the way their little beard goes that makes em look African?* Furthermore, the sentences could be paraphrased as pseudoclefts: *Maybe why I'm so interested in death is because my parents were old*; *Is what makes em look African the way their little beard goes?* However, the cleft pronoun in both (27) and (28) can also be taken as referring to a reason or cause evoked in the previous question. The sentences can thus also be paraphrased as follows: *Maybe the reason I'm so interested in death is because my parents were so old*; *the cause that makes them look African is the way their little beard goes*.

In (29), the pronoun seems to refer to a cause, but it is not introduced in a question or in an inverted pseudocleft clause. Instead the existence of a cause can be inferred from the fact that the speedometer fell, and the cause is referred to with the pronoun. The full cleft paraphrase

here would be *I knew exactly what it was that caused it.* The noncleft paraphrase would be *I knew exactly what the cause was.*

(29) I saw my .. my speedometer just go Brr=. .. like that just dow=n,. You know, and I knew exactly what **it** was.

The subject pronouns in (25)-(29) cannot be analyzed as 'referential' in the sense of referring to an individual entity. Rather, they refer in the sense that a pseudocleft subject phrase refers. Higgins (1973) labels pseudocleft subjects 'superscriptional' phrases, and explains this function as providing the heading on a list. The post-copular phrase provides a value for the variable introduced by the superscriptional phrase. Similarly, Barwise and Perry (1983) would refer to the subject pronoun in (25)-(29) or the corresponding pseudocleft subject as 'value free' uses, with the value for the variable being provided by the post-copular phrase.

It is consistent with the data, however, to claim that truncated cleft pronouns are true pleonastic pronouns, and that what the hearer must do is to reconstruct the material elided from the cleft clause. What's important here is that for purposes of interpretation it doesn't matter which analysis is chosen. What's critical is that the relevant material is in the focus of attention at the time of utterance. Either the referent of the pronoun must be resolved, or the logical form of the utterance must be enriched to provide the information in the elided cleft clause (Sperber & Wilson 1986).

Another type of truncated cleft is the type that Hedberg (1990) analyzed as a cleft with a full-clause clefted constituent, as in (30):[2]

(30) **It**'s just= … it gets dust accumulated in it, see it's all over the TV. (1.815)

In (30) the proposition is interpreted as the cause of the some substance blowing out of the air conditioner. Although Delahunty & Gatzkiewicz (2000) argue that the subject pronoun in such sentences is pleonastic, it could be interpreted as referring to a cause, reason, result, consequence, etc. implied in previous discourse. Note that a superscriptional full subject noun phrase could replace the pronominal subject:

(31) **The cause/reason** is just that it gets dust accumulated in it.

3.3. Truncated extraposition pronouns

Finally, we classified several pronouns as truncated extraposition construction subjects, for example, those shown in (32) and (33).

(32) And the second week they were just like (YELL), and so I had to scream at them, all week long. And **it** was really awful, cause I felt horrible about it. (4.83)

(33) You can't really tell when they blush. **It**'s very unusual. (4.298)

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[2] Delahunty (2001) labels sentences like (30) as 'inferential constructions' and analyzes them as truncated *it*-clefts.

Both of these sentences can be paraphrased as extraposition constructions: *And it was really awful that I had to scream at them, all week long; It's very unusual for them to blush.* They thus have a full paraphrase that is identical to the type that full extraposition clauses have, as in (34) and (35):

(34) But, for me **it**'s really difficult to pick up a book about death. (5.217)

(35) And finally **it** dawns on Lisabeth that she doesn't see Mom that much. (6.275)

In (34) the extraposed element is an infinitival clause, like the possibly elided clause in (33), and the latter sentence could be paraphrased, *But, for them to pick up a book about death is really difficult.* And in (35) the extraposed clause is a finite clause, like the possibly elided clause in (32), and the latter sentence can be paraphrased, *And finally that she doesn't see Mom that much dawns on Lisabeth.*

Extraposition construction subjects are generally analyzed as pleonastic and we classified them as such in Table 1. But what's interesting is that the subject pronouns in the truncated cases could equally well be analyzed as referring to entities evoked in previous discourse, such as a situation in the case of (32) or a generic event or process in the case of (33). Once again, the pronoun can be replaced by a full definite phrase referring explicitly to such a referent:

(36) And **the situation** was really awful, cause I felt horrible about it.

(37) **The event of their blushing** is very unusual.

Again it doesn't matter if these examples are analyzed as referential pronoun constructions with non-NP antecedents, or as pleonastic subject constructions with elided clauses that need to be resolved. In either case, the missing material must be inferred from immediately previous discourse.

Table 3 breaks down pleonastic pronouns into the subtypes discussed here.

	N	%
Atmospheric	8	8.70
Full cleft	10	10.87
Full extraposition	26	28.26
Truncated cleft	27	29.35
Truncated extraposition	14	15.22
Other pleonastic	7	7.61
Total	92	100.00

Table 3: Pleonastic Pronouns

4. References

Asher, N. 1993. *Reference to abstract objects in discourse*. Dordrecht: Kluwer Academic.

Barwise, J. and J. Perry. 1983. *Situations and Attitudes*. Cambridge, MA: MIT Press.

Botley, S.,1996. Comparing demonstrative features in three written English genres. In *Proceedings of the Discourse Anaphora and Resolution Colloquium (DAARC96)*, pp. 86-105.

Byron, D., 2002. Resolving pronominal reference to abstract entities. In *The Proceedings of the 2002 Meeting of the Association for Computational Linguistics*.

Byron, D., 2000. Semantically enhanced pronouns. *In the Proceedings of DAARC2000: Third International Conference on Discourse Anaphora and Anaphor Resolution*, Lancaster University, UK.

Byron, D. and J. Allen, 1998. Resolving demonstrative pronouns in the TRAINS93 corpus. *In Proceedings of the Second Colloquium on Discourse Anaphora and Anaphor Resolution (DAARC2)*, PP. 68-81.

Cornish, F., 1999. *Anaphora, Discourse, and Understanding. Evidence from English and French,*. Oxford: Clarendon Press.

Delahunty, G., 2001. Discourse functions of inferential sentences. *Linguistics* 39:517-545.

Delahunty, G. and L. Gatzkiewicz, 2000. On the Spanish inferential construction *ser que*. *Pragmatics* 10:301-22.

Dubois, J.W., W. L. Chafe, C. Meyer, and S. A. Thompson,. 2000. Santa Barbara Corpus of Spoken American English--Part 1. Linguistic Data Consortium.

Eckert, M. and M. Strube, 2000. Dialogue acts, synchronising units and anaphora resolution. *Journal of Semantics* 17:51-89.

Erku, F. and J. K. Gundel, 1987. The pragmatics of indirect anaphors. In J. Verschueren and M. Bertuccelli-Papi (eds), *The pragmatic perspective: Selected papers from the 1985 International Pragmatics Conference*, Amsterdam, John Benjamins, 533-45.

Gundel, J. K., N. Hedberg and R. Zacharski, 2000. Statut cognitif et forme des anaphoriques indirects. *Verbum* 22:79-102.

Gundel, J. K., N. Hedberg and R. Zacharski. 1993. Cognitive status and the form of referring expression in discourse. *Language* 69:274-307.

Hawkins, J. A. 1978. *Definiteness and indefiniteness: A study in reference and grammaticality predictions*, London, Croom Helm.

Hawkins, J. A. 1991. On (in)definite articles. *Journal of Linguistics* 27:405-42.

Hedberg, N. 1990. *Discourse pragmatics and cleft sentences in English*. Ph.D. dissertation, University of Minnesota.

Hedberg, N. 2000. The referential status of clefts. *Language* 76:891-920.

Hegarty, M., J. K. Gundel, & K. Borthein. 2001. Information structure and the accessibility of clausally introduced referents. *Theoretical Linguistics* 27.

Higgins, F. R. 1986. *The Pseudocleft Construction in English*. New York: Garland.

Hirschberg, J. 1991. *A theory of scalar implicatures*. New York: Garland.

Prince, E. 1981. Towards a taxonomy of given-new information. In P. Cole (ed.), *Radical pragmatics*. New York: Academic Press. 223-255.

Sperber, D. and D. Wilson 1986. *Relevance: Communication and cognition*. Oxford: Blackwell.

Webber, B. 1991. Structure and Ostension in the Interpretation of discourse deixis. *Language and Cognitive Processes* 6:107-135.