Degrees of Specificity and (In)definiteness in Discourse

Danijela Trenkic
Research Centre for English and Applied Linguistics
University of Cambridge

Abstract
The paper argues that in a cloze test, first mention modified NPs are more readily marked as definite than bare nouns, because of the potential of the extra material to create a new pragmatic set on-line, in which the referent is perceived as unique. The fact, however, that the referents are first mention and that the pragmatic set of the whole situation of utterance usually stays more salient, will still make the indefinite marking of these NPs more probable. But the more modified an NP is, the less likely it is that the native speakers will reach a 100% consensus on what article to use.

Introduction

The central issue of this paper is specificity and definiteness of noun phrases (NPs) in English - the nature of these concepts, their interrelation and their grammatical marking in discourse.

The first part of the paper focuses on the traditional theoretical assumptions about definiteness and specificity and explains their shortcomings. Some of the recent accounts are then combined in order to give a more accurate picture of the concepts involved. Finally a hypothesis on the degrees of security of specificity inferring and definiteness marking in discourse is formulated.

The second part is the report on an experiment and analysis administered to test the proposed hypothesis.

1.

1.1 Definiteness

The traditional assumption about definiteness is that it marks **the information status** of a discourse referent: the indefinite article introduces new referents in discourse, the definite article refers back to the already introduced referents.

While this observation is basically correct, it does not account for all the uses of the articles in English, and as Lee (1997) remarks, there are "many exceptions to the 'default' 1-1 correlation between the definite/indefinite expressions and activated/new information".

First of all we must be perceptive of the phenomenon of associative anaphora (cf. Loebner, forthcoming). The first mention referents are often implicitly associated with previously introduced referents. Despite the sameness of their information status, which we could label 'available' or 'inferrable' (following Prince, 1981), the new referents may be marked as

either definite or indefinite. What influences the choice is their relation with the previously introduced referents or with the whole situation of utterance: if it is 1:1, the new referent is marked as definite, if it is 1:many the NP is marked as indefinite. The distinction between the articles in such a case amounts to the question of **uniqueness**.

Thus we can conclude from the discussion so far that the question of definiteness combines in it the status of information and the uniqueness of the referent. The uniqueness of the referent, however, is not absolute in any sense, but is relative to pragmatically delimited sets (following Hawkins' (1991) terminology, I will use the term P-sets) mutually manifest to speaker and hearer (for detailed account see Hawkins, 1991). The P-sets can be of different kinds (anaphoric, associative, situational, general knowledge, extra material in the NP etc.) and can compete mutually for salience. The definite article only signals that the referent is available and unique in one of these sets, but not in which set it is to be found. The indefinite article, on the other hand, can signal either a) that the referent is not unique in a P-set, or b) that it is not available in any of the mutually manifest P-sets.

As for the status of information that the articles may encode, it has to be born in mind that the choice does not depend solely on the speaker's assumptions about the hearer's information state, but on his assumptions about the hearer's ability and willingness to accept his packaging of information (cf. Lee, 1997). And since the use of the articles is sensitive to so many subjective parameters, the process of information packaging always involves risk (cf. Brown, 1987).

1.2 Specificity and Definiteness

The standard assumption of the philosophical and some of the linguistic literature is that definiteness and specificity interrelate in the following way:

definite --------> specific
indefinite ------> non-specific

which would implicate that the definite article is a grammatical marker of specificity whereas the indefinite article is the marker of non-specificity.

This question of marking specificity by means of the definite article has its origin in the traditional philosophical view that definite expressions are referring while indefinite expressions are non-referring. I take the position advocated in Lyons (1977) that expressions themselves do not refer, rather "it is the speaker who refers (by using some appropriate expression)", and I take it that both definite and indefinite expressions can be appropriate for reference since some studies (cf. Brown, 1995) have shown that the hearers are inclined to treat indefinite expressions as referring when "they do indeed succeed in referring" (ibid. 69).

I believe therefore that specificity correlates with reference, and only indirectly with definiteness. All referentially used expressions are specific, be they definite or indefinite. And both definites and indefinites could have other uses as well. It is only that the proportion of all definites used as referential is higher than the proportion of all indefinites used in that way. But it does not mean that the percentage of the specific indefinites in discourse is negligible (cf. Dahl, 1987).

But we have not yet addressed the question of what specificity is and how it is inferred in discourse. One of the recent accounts is that of Enç (1991). She claims that:

"Definiteness and specificity of NPs are clearly related phenomena. Both definites and specifics require their discourse referents to be linked to previously established discourse referents, and both indefinites and nonspecifics require that their discourse referents not be linked to previously established discourse referents. What distinguishes these notions is the nature of linking" (Enç, 1991:9).

"Definiteness involves a strong link, that of identity of reference, whereas **specificity involves a weak link, that of being a subset of or standing in some recoverable relation to a familiar object**" (emphasis added) (ibid. 24).

This account predicts that all definite expressions will be necessarily specific (not allowing for predicational uses where the definites are used denotationally, not referentially), as well as indefinites which fall in one of the P-sets mutually manifest to speaker and hearer, but are not unique.

The obvious problem of this account can be seen if we consider the following example:

(1) *A student in the syntax class* cheated in the final exam.

<div align="right">(Gundel et al., 1993)</div>

In uttering the above sentence the speaker may a) have a specific individual in mind, or b) state that one of all the students, of whose identity he is ignorant, cheated in the exam. Enç's account does not capture this difference.

The way to solve this problem is to postulate that specificity does not involve the interaction between the speaker and hearer (as definiteness does) and what is specific for both, but whether in uttering a nominal expression the speaker has a specific entity in mind. Thus specificity is only a speaker-oriented concept (cf. Vangsnes, forthcoming; J. Lyons, 1977; C. Lyons, forthcoming). According to this view the nominal in:

(2) I bought *a house*.

is specific, even if uttered out of the blue, since the speaker is bound to have an experience of buying a specific house.

The problem of this account is that it equates the status of the indefinites used non-referentially and that of the definites used attributively (cf. Donnellan, 1966):

(3)   a) I haven't started the class yet; I'm missing **a student** -- Mary's always late. (specific)
        b) I haven't started the class yet; I'm missing **a student** -- there should be fifteen, and I only count 14. (non-specific)

(4)   a) We can't start the seminar, because **the student who's giving the presentation** is absent -- typical of Bill, he's so unreliable. (specific)
        b) We can't start the seminar, because **the student who's giving the presentation** is absent -- I'd go and find whoever it is, but no one can remember, and half the class is absent. (non-specific)

(C. Lyons, forthcoming)

It is somehow difficult to accept, at least on the intuitive level, that the status of the non-specific indefinites and the 'non-specific' definites is exactly the same. In order to capture the difference between them let us look at the pictures below:
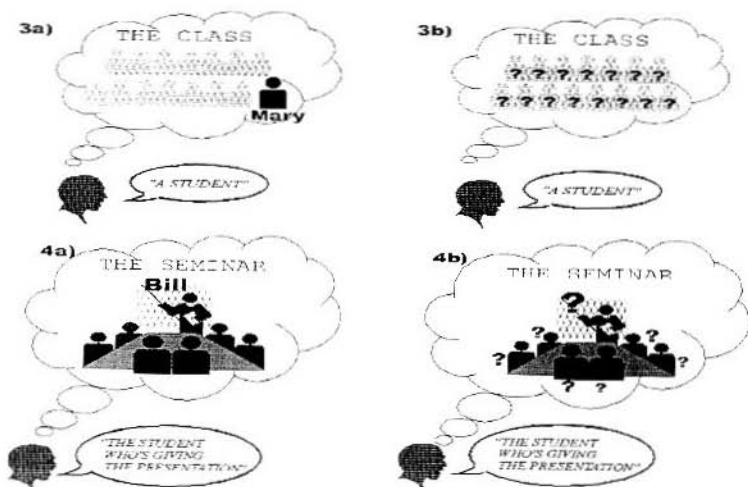
The difference between 3b and 4b is that in the latter example there is a specific slot in the universe of discourse (see Givon, 1984) or in the 'scenario' of a class (see Sanford and Garrod, 1981), to which the speaker refers. So even if he does not know the identity of the student in the real world, the specific slot for such an entity exists. In language use, the speaker is not referring to the entities in the world but to the mental representations in the "universe of discourse ... constructed or negotiated between speaker and hearer" (Givon, 1984:387). The real world is therefore "not necessary in order for language to carry on its referential function" (ibid. 389).

To conclude, specific here has to do with whether the speaker has a specific slot in mind in which an entity will fall, which itself could be specific or not. For convenience of use, however, I will continue to use 'specific entity' for 'specific slot'.

Specificity is only speaker oriented and is not overtly marked in English. *Thus the hearer can only infer with greater or lesser degree of security whether he is to take an NP as specific or not.* He is on the safe side with the referentially used definites since 'the' signals that the referent (or the unique slot in a P-set in which a referent is to be placed) is mutually manifest to both participants in the communication. He is less secure with the indefinites, since they can have both referential and denotational meaning in the same linguistic context. There is no overt grammatical marker which would guide the hearer to infer whether the speaker intended an indefinite to be referential/specific or not.

However, as Enç remarks, specificity of an indefinite is sometimes predictable (1991:10). But while she claims that the indefinites in partitive constructions are necessarily specific, because the set-membership is asserted, I reject this view (see the example (1) and the discussion). What I accept is that an entity to be specific has to be somehow anchored to the situation of utterance. And I take that it is anchored to the situation through the speaker's personal experience. Thus if the speaker is reporting on his past and present realis experiences or on the events he has witnessed, the indefinite NPs must be specific. In reports on somebody else's experience, in negations, questions and future reference, there is an inherent ambiguity with respect to the specific and non-specific readings of indefinites.

However, "the set of devices which function as conventional ways of signalling intention contains not only lexical items, but rules as well" (Morgan, 1975:445). The principle of language economy, the least effort (Ziff, 1969) or the maxim of relevance (Sperber and Wilson, 1986), all make the specific reading of indefinites in discourse a default. The default can, of course, be overridden by the subsequent discourse, and it seems that the hearers adopt a 'wait and see' strategy to assign [+/- spec] value to indefinite nominals.

1.3 Hypothesis
The hypothesis concerns only first mention referents in discourse and to what extent "the extra material" in an NP can license its specific interpretation and definiteness marking.

i) extra material and the speaker's choice to mark an NP as [+/- definite].
It seems that extra material in an NP has a potential to delimit the participants' pragmatic context in such a way as to create a new P-set in which the referent would be perceived as mutually manifest and unique due to the fact that the reference act occurred (see Clark and Marshall, 1992:26).

The more extra material there is in an NP, the greater the likelihood that a new mutually manifest P-set will be created and the greater the chances that the referent will be perceived as unique in it and consequently that the speaker will decide to mark it as definite (to suppose that the hearer will be able and willing to accept the information as available).

But although extra material in an NP may licence the creation of a new P-set, all that we can talk about is *a degree of security in definiteness marking*, since the information contained in the modifiers is not such as to establish the absolute familiarity (and uniqueness) that would make 'the' obligatory (C. Lyons, forthcoming).

ii) extra material and specificity
It seems that due to the principle of language economy the more extra material there is in an indefinite NP, the more likely the hearer is to infer that the speaker has a specific entity in mind. Moreover, the hearer is likely to infer that the entity is outside their mutually manifest P-sets, since were the contrary the case, the extra-material would have .the potential to render the nominal definite.

It could be predicted then that if all the articles were removed from a text and a native speaker of English was then asked to fill the articles back, as far as the first mention referents with potential 1:many relation to the situation of utterance are concerned, the bare nouns would be more uniformly marked by an indefinite article whereas more heavily modified NPs would show variability between definiteness and indefiniteness marking because of the potential of that material to create a new P-set in which the referent could be taken as unique. However, the fact that the referents are first mention and do have a potential 1:many relation with the P-set of the whole situation of utterance, that P-set would stay more salient and the NPs, although they will show variability, will be predominantly marked by the indefinite article.

2 Experiment
2.1. Data, subjects and conditions
To test the hypothesis in naturally occurring data I have taken a short newspaper article on a rugby match:

A concerted effort by Gloucester's forwards enabled them to avoid a seventh successive league defeat by Sale at a sodden Heywood Road last night.

Yet Sale, having allowed the visitors to draw level from a half-time deficit of 6-18, could have snatched victory in the final minute - but, as against Bath last Saturday, the previously impeccable Shane Howarth pulled a kickable penalty wide.

Once again Sale's problems stemmed from tight situations. Gloucester, who had been kept out from close range in the first half, scored direct from a line-out in the second and made their escape with a penalty try when the home pack repeatedly collapsed the scrum.

Gloucester squandered a good early position through an offside offence and at once, at the other end, Robert Jewell stupidly bodychecked Jim Mallinder, leaving Howarth an easy penalty.

Mark Mapletoft was successful with a more difficult kick five minutes later, but, with Sale pressing and Charlie Vyvyan - in his farewell appearance before returning to Wharfedale - slipping the ball free despite Scott Benton's attentions, Kevin Ellis squirmed his way through a mass of bodies for a try which Howarth converted.

Further Gloucester pressure produced only another Mapletoft penalty, and with Ellis profiting from good possession Sale scored again five minutes from half-time when Howarth's cross-kick produced Jos Baxendell's first try of an injury-plagued season, after Lloyd had been nailed by Mallinder.

Howarth missed the kick but punished another Gloucester offside a few moment later with a second penalty.

With the conditions rapidly deteriorating, suiting the heavier Gloucester forwards, the scenario looked increasingly ominous for Sale even though Howarth matched Mapletoft with two more penalties. Phil Vickery's try from close range gave Gloucester heart and after a grand run by the prop Richard Tombs and a series of collapsed scrums Mapletoft was left with a simple levelling conversion as the Sale scrum collapsed once too often.

(David Irvine in **The Guardian**, December 31 1997)

I first tried to establish how many of the singular noun phrases overtly marked by 'the' and 'a' are specific, in order to see whether the assumed default: definite = specific, indefinite = non-specific holds.

To do that, I applied the principle that if the speaker refers to a series of events he has witnessed, the NPs used are specific, irrespectively of their definiteness marking.

In this short text of 316 words, there were 75 NPs, 24 of which were proper names, 9 possessive phrases, 2 nominals in set-expressions, 8 plurals and 32 singular NPs. Only singular NPs introduced by an overt article were taken

into account to avoid the controversy about the definiteness status of proper names and possessives in English, and because of the fact that indefiniteness is not necessarily overtly marked with plurals.

Out of 3O singular NPs introduced by the definite and indefinite article (2 NPs introduced with 'another' were omitted) 18 were indefinite (60%) and 12 definite (40%). Such a distribution is predictable since the writer is reporting 'news' on an event which he assumes the readers will not be familiar with.

Due to the fact that the writer is describing a series of specific events he has witnessed, the percentage of specifically referring nominals is high. All of the definite expressions were used referentially, and are therefore specific, and out of 20 indefinite NPs all but one ('a few moments later') were used referentially, and are therefore also specific. This supports the view taken above that the assumed default does not hold, that specificity is not a differentiating feature between definites and indefinites and that, in fact, [+specific] is a default value of nominals in language use (cf. Jaszczolt, 1997; Hawkins 1991).

Once I have established the specificity of NPs in the text I wanted to test whether the modified specific indefinites are more readily substituted by definites than bare indefinite nominals.

To test this 20 native speakers of English took part in the following experiment:

Condition 1: a cloze test
From the text above all the articles were removed and the subjects were then asked to fill in the gaps with the definite or indefinite article.

Condition 2: a mixed-up cloze test
Articles were removed from the text, and the noun phrases then presented at random order. The subjects were asked to fill in the gaps with the definite or indefinite article.

Condition 3:
Subjects were asked to disregard any judgements they have made earlier and to say whether they could possibly use 'the' in the nominal expressions in question.

2.2. Results and analysis
Condition 1
The results of the close test with respect to [+definiteness] marking of the nominal phrases can be summarized in the following cline: The results of Condition 1 (cloze-test)

1	The first half	100%	20/20
2	The second (half)	100%	20/20
3	The other end	100%	20/20
4	The final minute	100%	20/20
5	The home pack	100%	20/20
6	The scrum	100%	20/20
7	The Sale scrum	100%	20/20
8	The ball	100%	20/20
9	The scenario	100%	20/20
10	The previously impeccable Shane Howarth	100%	20/20
11	The kick (2nd mention)	90%	18/20
12	a sodden Heywood Road	60%	12/20
13	a mass of bodies	55%	11/20
14	a line-out	50%	10/20
15	The prop Richard Tombs	30%	6/20
16	a seventh successive league defeat	25%	5/20
17	an injury-plagued season	25%	5/20
18	a try which Howarth converted	25%	5/20
19	a half-time deficit of 6-18	20%	4/20
20	a concerted effort by Gloucester forwards	20%	4/20
21	a simple levelling conversion	15%	3/20
22	a good early position	10%	2/20
23	a kickable penalty	10%	2/20
24	a more difficult kick	0%	0/20
25	a second penalty	0%	0/20
26	an easy penalty	0%	0/20
27	a penalty try	0%	0/20
28	an offside offence	0%	0/20
29	a series of collapsed scrums	0%	0/20
30	a grand run by the prop Richard Tombs	0%	0/20

This result supports the theoretical discussion about the definiteness marking of the first mention referents in discourse. The new referents which could be uniquely linked to either some of the previously introduced discourse referents or to the situation of utterance, are uniformly marked by all subjects with the definite article (examples 1-10). Although the referents are first mention, general knowledge of their uniqueness is enough to licence the definiteness marking. The new referents which, according to subjects' encyclopedic knowledge, stand in 1:many relation to the situation of utterance should be marked as indefinite. This is what we found in the examples 24-30.

However the prediction was that the subjects were not going to recover all the articles as they were in the original, and that a certain degree of disagreement among the subjects were to be expected, notably with the modified indefinites. The middle part of the cline thus addresses our

hypothesis that the more material there is in an NP, the more likely it is that a new P-set will be brought about and that the referent of the head noun will be perceived as unique in it and will receive the definiteness marking.

In examples 16-24, the non-unique head nouns modified by relative clauses, partitive constructions, descriptive adjectives and ordinal numbers, were marked by the definite article by 10-30% of all subjects. Although the head nouns stand in 1:many relation with the whole situation of utterance (and consequently the majority of subjects did recover the indefinite article), the extra material was powerful enough to serve as an "internal licenser" (Enç, 1991:22) for a creation of a new, independent P-set in relation to which the referent was seen as unique, at least by a certain number of subjects.

The results also show that extra-material that is most likely to bring about the creation of a new P-sets are relative clauses, ordinal numbers and partitive constructions. Descriptive adjectives also exert some influence, but the evaluative adjectives alone do not. However, even with the partitive constructions and relatives we can only talk about tendencies, since the examples from the bottom of the list ('a grand run by the prop Richard Tombs' and 'a series of collapsed scrums') show that the information contained in them is not such as to establish the uniqueness in the P-set which would make 'the' obligatory.

The first mention bare nominal which received a rather high percentage of definiteness marking (contrary to our predictions) was 'line out'. Those who marked it as definite, however, said in a post-test discussion that they did not have a type of kick in rugby in mind but the actual line on the pitch, which does have 1:1 relation with the situation of the utterance.

Another case which calls attention is 'a mass of bodies' which received 55% of definiteness marking. This is a good example of the conflict of the definite associative anaphora (bodies are implied through the text) and the first mention indefinite marking.

On the other hand, the expression that was marked by the definite article in the original but received a meagre 30% of definiteness marking in the cloze test was 'the prop Richard Tombs'. Most of the subjects did not feel a need to mark it by any article. The reason for such a behaviour seems to be the subjects' unfamiliarity with the terminology of rugby. They took 'prop' as the title modifying the proper name (something like 'president Clinton').

The noun phrases 'the previously impeccable Shane Howarth' and 'a sodden Heywood Road' are the examples of the use of the articles with qualified proper names to show that the features ascribed to them are either permanent (the definite article) or transient (the indefinite article) (see Morgan, 1975). With the latter example, it seems that some of the subjects assumed that 'sodden' was a permanent property of the mentioned place.

Finally, there was just one anaphoric reference, 'the kick', and surprisingly enough, it was not marked by the definite article with 100% agreement. 10%

of subjects failed to observe the coreferentiality with the previously introduced 'kick', which suggests that they did not manage to create a coherent discourse model by that point, either because the cognitive demand of the task was high and it impeded their short-term memory, or simply because they were not concentrating. And as a consequence, the bare nominal with the potential 1:many relation with the situation of utterance made them opt for the indefinite article.

Condition 2
The aim was to see what happens with definiteness marking when discourse organization is removed. It was expected that in this way the principle of marking the new information by the indefinite article will be eliminated and that heavily modified expressions will therefore get an even higher percentage of definiteness marking, since there will be no P-set of the scenario of a match to compete with the 'local' P-set formed by the extra material in the NP. The results, however, were not dramatically different from those obtained in the cloze-test, the reason for that being that the subjects were able to reconstruct the frame of a rugby match even with the little material they were offered, and then to impose the expectation and restriction of it to the definiteness marking.

Still a slight increase in the definiteness marking of heavily modified NPs was observed:
- seventh successive league defeat (5% increase)
- half-time deficit (15% increase)
- good early position (5% increase)
- mass of bodies (10% increase)
- try which Howarth converted (10% increase)
- injury-plagued season (10% increase)
- simple levelling conversion (10% increase)

Condition 3
The following cline was the result of the experimental condition: "Could you possibly use 'the'?"

1	the first half	100%	20/20
2	the second half	100%	20/20
3	the other end	100%	20/20
4	the final minute	100%	20/20
5	the home pack	100%	20/20
6	the scrum	100%	20/20
7	the Sale scrum	100%	20/20
8	the ball	100%	20/20
9	the scenario	100%	20/20
10	the previously impeccable Shane Howarth	100%	20/20

11	the kick (2nd mention)	100%	20/20
12	a line-out	100%	20/20
13	a mass of bodies	100%	20/20
14	a series of collapsed scrums	100%	20/20
15	an injury-plagued season	90%	18/20
16	a concerted effort by Gloucester's forwards	90%	18/20
17	a more difficult kick	80%	16/20
18	a half-time deficit of 6-18	80%	16/20
19	a try which Howarth converted	70%	14/20
20	a kickable penalty	70%	14/20
21	a second penalty	70%	14/20
22	a grand run by the prop Richard Tombs	70%	14/20
23	a sodden Heywood Road	60%	12/20
24	a seventh successive league defeat	60%	12/20
25	a simple levelling conversion	60%	12/20
26	an easy penalty	60%	12/20
27	an offside offence	50%	10/20
28	a penalty try	50%	10/20
29	the prop Richard Tombs	50%	10/20
30	a good early position	40%	8/20

Although the proportion of [+definiteness] marking is (expectedly) higher in this condition, the general trend remained the same. There was no change at the upper part of the cline and all the NPs that were marked with the definite article in over 50% of cases in the cloze test received 100% agreement by the subjects that they could be marked by 'the'. In the middle and lower part of the cline the expressions modified by ordinal numbers, relative clauses and partitive constructions received definiteness marking of 60-90%, they were followed by those modified by adjectives (40-60%), and bare nominals (50%).

The result where even the bare nominals received 'the' in 50% of cases cold be explained by the fact that the subjects were free to construct a context where these expression would be second-mention. This possibility of the appropriate context formation can also explain why 'a series of collapsed scrums', 'a grand run by the prop Richard Tombs', 'a more difficult kick' and 'a second penalty' all moved up the cline considerably. The partitive constructions, the comparative construction and the ordinal number all licensed the creation of a P-set in which the head noun could be taken as unique.

The example of 'the prop Richard Tombs' and the reluctance of the subjects to mark it with any article seem to support the idea that they were not acquainted with the particulars of rugby.

Conclusion

The results of all the three conditions could be summed up by Lambrecht's (1994:84) remark that "while definite/indefinite contrast is in principle a matter of yes/no, identifiability is in principle a mater of degree".

Extra material in an NP has a potential to create a new P-set, but the information is not such as to establish the familiarity that would make 'the' obligatory. When competing with the first mention indefinite marking, the extra material more often loses than wins the battle.

References

Brown, G. (1987) "Modelling discourse participants' knowledge". In Monaghan (ed.), *Grammar in the Construction of Text*. London: Frances Pinter.

Brown, G. (1995) *Speakers, Listeners and Communication*. Cambridge: Cambridge University Press.

Clark, H.H. and R. Marshall (1992) "Definite reference and mutual knowledge". In H. Clark *Arenas of Language Use*. Chicago: The University of Chicago Press.

Dahl, O. (1987) "Referent-introducing indefinite noun phrases". In Dyvik and Rosen (eds.), *Papers from the Tenth Scandinavian Conference of Linguistics*. Bergen.

Donnellan, K.S. (1966) "Reference and definite descriptions". In *Philosophical Review* 74.

Enç, M. (1991) "The Semantics of Specificity". In *Linguistic Inquiry* 22:1-25.

Fraurud, K. (1987) "Hierarchical relations between discourse referents and the interpretation of antecedentless definite phrases". In Dyvik and Rosen (eds.), *Papers from the Tenth Scandinavian Conference of Linguistics*. Bergen.

Gundel, J.K., Hedberg, N. and R. Zacharski (1993) "Cognitive status and the forms of referring expressions in discourse". In Language 1993:274-307.

Givon T. (1984) *Syntax Vol. I*. John Benjamins

Hawkins, J.A. (1991) "On (in)definite articles: implicatures and (un)grammaticality prediction". In *Journal of Linguistics* 27:405-442.

Jaszczolt, K.M. (1997) "The 'default *de re*' principle for the interpretation of belief utterances". In *Journal of Pragmatics* 28:315-336.

Lambrecht, K. (1994) *Information Structure and Sentence Form*. Cambridge: Cambridge University Press.

Lee, B.P.H. (1997) Establishing Common Ground in Written Correspondence, manuscript of a dissertation submitted for the degree of Doctor of Philosophy at the University of Cambridge, October, 1997.

Loebner, S. (to appear in Journal of Semantics) "Definite Associative Anaphora"

Lyons, C.G. (forthcoming) *Definiteness*. Cambridge: Cambridge University Press.

Lyons, J. (1977) *Semantics*. Cambridge: Cambridge University Press.

Morgan, J.L. (1975) "Some remarks on the nature of sentences". In *Papers from the Parasession on Functionalism*. Chicago Linguistic Society, 433-449.

Prince, E.F. (1981) "Toward a taxonomy of given-new information". In Cole (ed.) *Radical Pragmatics*, London: Academic Press.

Sanford, A.J. and Garrod, S.C. (1981) *Understanding Written Language*. Chichester: Wiley.

Sperber, D. and Wilson, D. (1986) *Relevance*. Oxford: Basil Blackwell.

Vangsnes, O.A. (to appear in J. Costa, R. Goedemans and R. van de Vijver (eds.), Proceedings of ConSOLE 4.). "A Configurational Approach to Noun Phrases Interpretation".

Ziff, P. (1969) "Natural and Formal Languages". In S Hook (ed.), *Language and Philosophy*. New York: New York University Press.

Danijela Trenkic
Darwin College
CB3 9EU
Cambridge
Great Britain
e-mail: dt211@cam.ac.uk