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## DEFINITENESS AND INDEFINITENESS: A SCALAR REPRESENTATION\*

### 1. INTRODUCTION

The notion 'definite' occupies a prominent place in English linguistics, and has been studied by scholars from many different backgrounds and perspectives. Yet, despite the vast amount of literature devoted to this notion, none of the definitions presented thus far seems to be satisfactory. Nevertheless there appears to be more or less general agreement on which NPs are 'definite' and which are 'indefinite'. Thus, apart from NPs with the definite article, NPs containing a demonstrative or possessive determiner, pronouns and proper names are also included under the rubric 'definite'. As for the 'indefinites', not only NPs with the indefinite article a(n), but also NPs with the zero article, some and number determiners, as well as the so-called partitives, are included in the term. The reason why theories developed thus far have not been able to provide a satisfactory definition of the terms 'definite' and 'indefinite' is simply that they fail to account for both the similarities and the differences in meaning and use between the various types of definite and indefinite NPs listed above.

It is of course true that many theories of definiteness do indeed not even try to provide such a unified account. In philosophical logic, for instance, the discussion centres on the notion of 'definite reference', and consequently on the use of the definite article, as it is assumed that definite reference can only be brought about by the definite article in singular nominal expressions (Russell, 1905; Strawson, 1950; Donnellan, 1966; Searle, 1969). Other theories, mostly linguistic, tend to be interested first and foremost in the contrast between (singular and plural) NPs with the definite and the indefinite article, thereby either ignoring other types of definite and indefinite NPs (Christophersen, 1939<sup>1</sup>), or simply failing to apply to these other types (Hawkins, 1978).

There are, however, also theories that do provide an explanation for what the various types of definite or indefinite NPs have in common; in particular those theories that undertake to describe the difference between definite and indefinite in pragmatic terms (e.g. Chafe, 1976; Dik, 1978). Yet what these theories still fail to recognise is that in order to be able to come to a full understanding of the notions concerned not only the similarities, but also the differences between the various types and uses of definite and indefinite NPs must be accounted for. The principle aim of this article will be to show that there are two reasons why this is not possible in any of the existing theories. The first of these is that all these theories adhere to the idea of definiteness and indefiniteness as presenting a strict dichotomy: an NP is either definite or indefinite, i.e. either familiar or unfamiliar (Christophersen, 1939), identifiable or unidentifiable (Chafe, 1976; Dik, 1978); either

strong or weak (Milsark, 1977), inclusive or exclusive (Hawkins, 1978). Secondly, all these theories are based on the assumption that there is a direct relation between the formal characteristics of an NP and its definiteness status. Thus NPs with the definite article, demonstratives, possessives, pronouns and proper names are always assumed to be definite; formally indefinite NPs necessarily function as 'indefinites'.

In what follows we will first of all have a look at some of the definitions of definiteness and indefiniteness that have been presented thus far, illustrating their failure to capture both the similarities and the differences between the various types and uses of definite and indefinite NPs. In this way the need for a more differentiated definition of the terms definite and indefinite will be demonstrated (section 2). In section 3 a first move will be made towards developing a theory based on such differentiated notions of definite and indefinite: a pragmatic-cognitive approach to definiteness and indefiniteness will be proposed, in which definite and indefinite will no longer be seen as a black-and-white contrast, but rather as a scale, allowing for some ranging between the two extremes. Moreover, this theory will start from the assumption that the notions definite and indefinite are not in the first place related to the form of an NP, but rather to the way in which that NP is to be interpreted in the given setting. Finally, in section 4, we will draw up a scale of definiteness and indefiniteness, and show how the proposed approach to definiteness and indefiniteness can provide a unified account of both the similarities and the differences in form and use between the various definite and indefinite NPs.

## 2. THE NOTIONS 'DEFINITE' AND 'INDEFINITE'

Hawkins (1978) describes the contrast between the definite and the indefinite article as follows:

... we argue that there is a fundamental opposition between the and a/some: the former refers inclusively to all (the pragmatically delimited) objects; the latter refer to not-all, i.e. there are claimed to exist other objects which are excluded from the reference of an indefinite description. (Hawkins, 1978: 17)

In other words, the definite article must be seen as a kind of universal quantifier, the only difference being that the refers not to 'all objects in any absolute sense, but instead [to] all objects within a domain of quantification that is pragmatically restricted' (Hawkins, 1978: 160).

Now, although the title of Hawkins' study -- Definiteness and Indefiniteness -- suggests a unified theory of all definite and indefinite NPs, it turns out that the definition of definiteness and indefiniteness presented by Hawkins only applies to NPs with the definite and indefinite article. Pronouns, proper names and NPs with a possessive determiner are left out of the discussion altogether, whereas demonstratives are shown to be neutral with regard to the inclusiveness-exclusiveness distinction (Hawkins, 1978: 156). Thus the use of a demonstrative in a sentence like

- (1) Pass me this/that bucket, please.

clearly indicates that there must be more than one bucket in the pragmatically restricted domain of quantification, in which case the NP fails to refer inclusively.

Furthermore, the inclusiveness-exclusiveness distinction is presented as a strict dichotomy: an NP either refers inclusively (in which case it is definite) or exclusively (in which case it is indefinite). Nevertheless Hawkins (1978: 161/162) notes that partitive expressions like some of the students involve in fact a twofold delimitation on the domain of quantification, whereby 'first one set is chosen, then a proper subset of that set selected'. And whereas the first set is referred to inclusively by means of a definite NP (the students), the selected subset is referred to exclusively, by means of the indefinite some. Clearly then such an NP cannot be regarded as either definite or indefinite -- which, in Hawkins' theory, leaves it without definiteness status altogether.

Thirdly, Hawkins distinguishes between eight different 'Usage Types' of the definite article, but still groups them all together under the heading 'definite', the reason being that regardless of how it is used, the definite article always refers inclusively. As we will presently show, however, inclusive reference is not, in fact, inherent to the meaning of the definite article, which means that there is actually no reason for invariably assigning the status 'definite' to all NPs containing the definite article.

Unlike Hawkins, Milsark (1977) clearly is an attempt to explain the similarities between the various types of definite NPs. First of all, Milsark dispenses with the terms 'definite' and 'indefinite', distinguishing instead between 'strong' and 'weak' NPs, according to their acceptability in existential sentences. Thus strong NPs, characterised as 'expressions of quantification' are excluded from postcopular position in existential sentences; weak NPs, characterised as 'expressions of cardinality' can occur in existential sentences. What unites all 'definites' (the, demonstratives, possessives and pronouns) is, however, not only that they are quantifying expressions, but that they all involve universal quantification (Milsark, 1977: 9). Thus Chomsky's (1975: 31) definition of the definite article as a kind of universal quantifier is extended to include all definite NPs. However, with regard to Hawkins' theory we already established that demonstratives do not refer inclusively to all objects within a restricted domain of quantification. Nor does it seem to be correct to maintain that NPs with a possessive determiner involve universal quantification. First of all, possessive NPs containing a 'relational noun' (Fillmore, 1968: 61) do not necessarily refer to all objects within a pragmatically restricted domain. Thus, use of the definite NP his leg in (2) does obviously not mean that Bill has only one leg, nor does use of my son in (3) necessarily mean that I have only one son:

- (2) Bill broke his leg yesterday.  
 (3) My son is coming over tonight.

But also possessives containing a non-relational noun need not function as a universal quantifier:

- (4) He put on his coat and left.

Clearly, then, universal quantification cannot be taken as the unifying feature of all definite NPs.

Moreover, by characterising all definite NPs as universal quantifiers Milsark does not explain the difference in use between, say, NPs with the definite article and demonstratives or possessives. And although he does recognise a difference in degree of quantification between the universal quantifiers (both covert, like definite NPs, and overt, such as every, each, any and all) and non-universal quantifiers (such as partitive expressions) he still groups them all together under the heading 'strong' -- simply on account of the fact that they cannot occur in existential sentences. Finally, according to Milsark's strong-weak distinction, definite NPs will always function as quantifiers, whereas indefinite NPs will always be cardinality words. The only exceptions in this respect are the determiners some and many, which have a weak/strong ambiguity (Milsark, 1977: 23; cf. Lyons, 1977: 455). Thus unstressed some, having a 'some vs all' reading, must be interpreted as a cardinality word, in which case it can occur in existential sentences:

- (5) a. Some salesmen walked in.  
b. There are some people in the bedroom.

Stressed some, or alternatively the partitive expression some of the, having a 'some but not others (of a particular group)' reading, must be seen as a quantifying expression, and is, according to Milsark, excluded from postcopular position in existential sentences:

- (6) a. Sóme/some of the salesmen walked in (others remained outside).  
b. \*There are some of the people in the bedroom.

The same applies to the determiner many; all other NPs must be seen as either weak or strong.

There may, however, be even more fundamental objections to the theories of Hawkins and Milsark. The first of these has to do with the fact that Milsark's distinction between weak and strong determiners is meant to serve as an explanation of the fact that some NPs can occur in existential sentences, whereas others cannot. For, Milsark argues, if we assume that the expression there be in existential sentences is in fact equivalent to an expression of existential quantification, an existential sentence containing a strong NP would have two quantifications on the NP, and may as such be expected to be anomalous (Milsark, 1977: 24). Hannay (1985b: 105), however, observes that partitive expressions, though classed by Milsark under the strong NPs, do in fact occur frequently in existential sentences, and argues that 'partitives behave in a sense more like the cardinal expressions than like the quantifier expressions'. However, as not only partitive expressions but also other expressions of proportion (more than half of the, the majority of the etc.), as well as (under certain circumstances) expressions with the definite article may appear in existential sentences (Hannay,



1985b: 107/112), one might justifiably call in question the plausibility of 'quantification' vs 'cardinality' as the common characteristic of the class of prohibited -- i.e. definite--NPs.

Furthermore, we have seen that both Hawkins and Milsark start from the assumption that the definite article functions as a kind of universal quantifier. As the following examples make clear, however, NPs with the definite article do not always refer inclusively, not even within a pragmatically restricted domain:

- (7) ... her pale amber eyes watering from the smoke of the cigarette fiends in the adjoining seats. (Alison Lurie, Foreign Affairs)
- (8) It was a gloomy day. The clouds were hiding the sun all day.
- (9) She went over the window and drew the lamp short makeshift curtains. (Muriel Spark, The Bachelors)
- (10) They fired at him repeatedly. One bullet hit him right under the knee.

We may therefore conclude that, even if NPs with the definite article usually refer inclusively, inclusive reference cannot be taken to be inherent to the meaning of the definite article (nor, as can be shown, exclusive reference to the meaning of the indefinite article<sup>2</sup>). This means either that the inclusiveness-exclusiveness distinction cannot explain the difference between the definite and the indefinite article, or, alternatively, that one must recognise that NPs with the definite article, in spite of the fact that they are formally definite, need not always be used as definites.

There is, of course, also an entirely different approach to definiteness and indefiniteness -- an approach not based on logical-semantic aspects such as the quantification-cardinality and inclusiveness-exclusiveness distinctions, but rather on the pragmatic notions of 'familiarity' or 'identifiability'. Christophersen (1939), for instance, developed a 'Familiarity Theory', according to which the definite article implies familiarity in the sense that it 'brings about that to the potential meaning (the idea) of a word is attached a certain association with previous knowledge' (Christophersen, 1939: 72). The indefinite articles (a, zero), on the other hand, do not imply familiarity; they do not require previous knowledge. Chafe (1976) notes that identifiable would be a better term than definite, since in using a definite item a speaker assumes that the hearer 'can pick out, from all the referents that might be categorised in this way, the one I have in mind' (Chafe, 1976: 39). In Functional Grammar (FG) the difference between definite and indefinite is also captured in pragmatic terms:

by means of a definite term the speaker expresses the fact that he acts on the presupposition that the addressee can identify the referent(s) of the term in question; by using an indefinite term the speaker expresses the fact that he does not act on this presupposition. (Dik, 1978: 61)

The obvious advantage of such an approach to definiteness is that, since it does not take universal quantification as a characteristic of the definite article (as in Hawkins), or even of all definite NPs (as in Milsark), it is possible to provide a unified account of the definite article, demonstratives, possessives, pronouns and proper names. What all these NPs have in common is that they are assumed to present information that is somehow identifiable for the hearer. And as Chafe (1976: 39) points out, such an approach can even explain the difference between NPs with the definite article and demonstratives:

Words like this and that include the status of definiteness in what they convey, but they also include an indication of why the speaker expects the addressee to be able to identify the referent: its closeness to the speaker or to this point in the discussion, its distance from the one or the other, or the like.

Thus it seems that in this way not only the similarities between the various types of definite NPs can be accounted for, but also the differences between them: on the one hand they are all assumed to convey identifiable information; on the other hand they differ with respect to the grounds on which they can be assumed to be identifiable.

This, however, does not solve all our problems. Thus definiteness and indefiniteness are still regarded as presenting a strict dichotomy: an NP is either familiar/identifiable or unfamiliar/unidentifiable. This is particularly clear in Dik's theory of FG, where definiteness and indefiniteness are expressed by means of 'term operators' in the underlying representation of a term. Definite NPs are represented by the term operator d; indefinite NPs by means of the term operator i:

(dlx <sub>i</sub> : man (x <sub>i</sub> ))	:	the man
(ilx <sub>i</sub> : man (x <sub>i</sub> ))	:	a man

Since we are clearly dealing with a binary system, partitive expressions like some of the students and indefinite expressions like some students (with unstressed some) are all treated as indefinite expressions, that is, are all represented by means of the indefiniteness operator i (cf. Brown, 1985: 138/139). Like Hawkins, however, Dik interprets partitive expressions as involving a twofold delimitation, as 'indefinite descriptions of a subset of the set described by the definite description' (Dik, 1974: 38). This means that unlike unstressed some (which is used as an indefinite description of a subset of all existing students, not of a set described by a definite description), partitive expressions contain both a definite and an indefinite element. However, a system in which only two categories are distinguished can obviously not convey this difference in definiteness status between partitive expressions and indefinites.

Moreover, these pragmatic theories, too, hold on to the idea of a direct relation between the form of an NP and its definiteness status. Thus, to generalise over all definite NPs, the definiteness operator  $\underline{d}$  is assumed to be present in the underlying structure not only of NPs with the definite article, but also of demonstratives, personal pronouns and proper names (Dik, 1978: 62). These NPs will therefore always be presented as 'definites', regardless of the way they are used. As noted before, this does not seem to be a faithful representation of the facts. Christophersen, for instance, distinguishes between different 'bases of understanding' between speaker and hearer, justifying the use of a definite NP (cf. Hawkins' 'Usage types of the definite article'). The most straightforward of these is the 'explicit contextual basis', whereby a definite NP is used anaphorically. The basis of understanding can, however, also be implicit, in which case it is created by various detours: 'certain ideas are so intimately associated that one is apt to call up the other' (Christophersen, 1939: 29; cf. Hawkins' 'associative anaphoric' use of the definite article, 1978: 123). Thus, after mentioning a book we may continue to talk about the author or the beginning. According to Christophersen the explicit and the implicit use of the definite article are, however, not essentially different, since the only necessary condition for the use of a definite NP -- that the hearer 'is left in no doubt as to what is meant by it' -- is fulfilled. Nevertheless the fact remains that there clearly is a difference in 'degree' of identifiability between anaphoric NPs (which are 'directly' identifiable) and NPs used on an implicit basis (which are identifiable 'by various detours'), even if one and the same form may be used on both occasions. On top of that it appears that it is sometimes even possible to use a definite NP in cases where the referent(s) can, in fact, not be assumed to be identifiable for the hearer. Consider the following examples:

- (11) a. Bill was working a lathe the other day. All of a sudden the machine stopped turning. (Hawkins, 1978: 107)  
 b. John went to a restaurant. He asked the waitress for coq au vin. (Schank and Abelson, 1977: 38)  
 c. There was a terrible hailstorm. The stones were so large they smashed various windows.
- (12) a. He has a son and a daughter. I don't know about the daughter, but his son appears to be quite a successful writer.  
 b. I met Bill and his wife yesterday at a party.  
 c. He fell off his bike and broke his arm.

In spite of the fact that in these sentences the same type of definite NP is used, there is still an obvious difference in the degree of identifiability. Thus the definite NPs in the (a) sentences are directly identifiable on the basis of prior mention, whereas in the (b) sentences they are only indirectly identifiable on the basis of prior mention of an associated object. The underlined NPs in the (c) sentences, however, cannot be assumed to be identifiable at all. It seems that in these sentences the definite NPs function more like partitive expressions: they refer to an unidentifiable subset of an identifiable set.

We may therefore conclude that although the existing pragmatic approaches to definiteness and indefiniteness account for the similarities between the different types of definite and indefinite NPs, and may even prove to be able to account for some of the differences between them, they still fall short in some ways. Thus they do not allow for any status in between definite and indefinite, nor do they allow for the fact that the different ways in which one and the same NP may be used may relate to a difference in definiteness status. In the next section we will therefore propose a pragmatic-cognitive theory of definiteness and indefiniteness which will undertake to fill in these gaps.

### 3. A PRAGMATIC-COGNITIVE THEORY OF DEFINITENESS AND INDEFINITENESS

#### 3.1 Basic assumptions

The theory we have in mind will be pragmatic in the sense that it starts from the premise that language must be seen in the first place as a 'cooperative action' (Dik, 1978), as a 'quasi-contractual matter' (Grice, 1975: 48), requiring a speaker to form his utterance in such a way that it serves as an instruction to the hearer with regard to the way in which the information presented in the utterance is supposed to be interpreted. This means that the utterance must not only be syntactically and semantically acceptable, but also pragmatically acceptable. A correct use of definiteness and indefiniteness must also be seen in this light. Definiteness and indefiniteness, too, serve as signals from the speaker to the hearer; they are used to indicate to the hearer how the information conveyed in an NP<sup>3</sup> is to be interpreted, and as such require the speaker to use them in an appropriate way. Consequently, a theory of definiteness and indefiniteness must provide a specification of the conditions under which it is appropriate to use a definite or an indefinite NP.

The theory will be cognitive in the sense that a speaker considers use of a definite or indefinite NP appropriate on the basis of assumptions made by that speaker about the knowledge he and the hearer share. According to the pragmatic theories mentioned in the preceding section, use of a definite NP serves to indicate that the speaker presupposes that the hearer is familiar with/can identify the information provided in that NP. In order to specify the appropriateness conditions for the use of definite and indefinite NPs, let us define familiarity/identifiability in terms of shared knowledge<sup>4</sup>. Thus, use of a definite NP is only appropriate if the information provided in an NP can be assumed to be part of the shared knowledge of speaker and hearer; use of an indefinite NP is only appropriate if this information cannot be assumed to be part of the shared knowledge of speaker and hearer.

It will be clear that, defined in this way, definiteness and indefiniteness are directly related to what Clark and Haviland (1977: 4) call the 'given-new contract', according to which

[the speaker] agrees to convey information he thinks the listener already knows as given information and to convey information he thinks the listener doesn't yet know as new information.

If we accept this characterisation of given-new, definiteness and indefiniteness can be defined in terms of givenness-newness: by using a definite NP the speaker indicates that the information provided in that NP is assumed to be given; by using an indefinite NP the speaker indicates that the information provided is assumed to be new. However, as Clark and Haviland -- as well as Prince (1981) in her taxonomy of given-new based on the Clark and Haviland notion of given-new -- point out, information need not always be either given (known) or new (unknown). Thus it is possible for a speaker to present information that he assumes to be (in the strict sense) unknown to the hearer as given (i.e. by using a definite NP), without necessarily being uncooperative. In that case the definiteness serves to indicate that the speaker assumes that the hearer can infer the information presented in the NP from information already present in the shared knowledge of speaker and hearer by building an 'inferential bridge' (Clark and Haviland, 1977: 6) between the 'inferrable' and the given information (cf. Schank and Abelson's (1977) notion of 'scripts'). Such information, however, can neither be characterised as 'known', nor as 'unknown', which means that the NP used to convey this information can, in fact, neither be characterised as definite nor as indefinite.

Apart from a difference in degree of identifiability between the various uses of definite and indefinite NPs, one must, however, also allow for the fact that the shared knowledge of speaker and hearer consists of different types of knowledge (Dik, 1986: 14ff), all of which may function as the basis for the use of a (particular kind of) definite NP<sup>5</sup>. This, then, illustrates the need to distinguish between different usage types of definite and indefinite NPs, each representing a different degree of definiteness/indefiniteness.

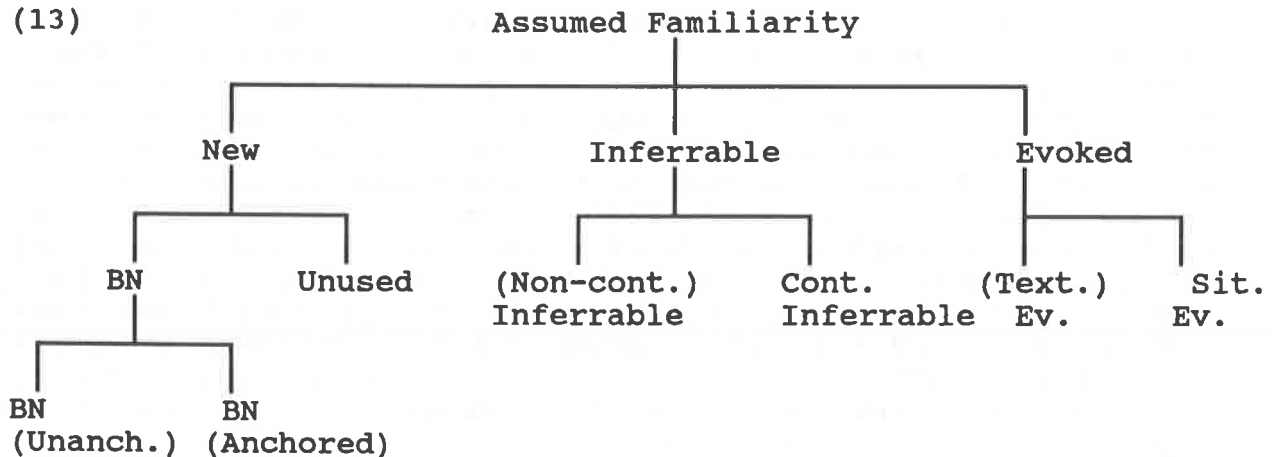
### 3.2 Prince's Taxonomy of given-new

Prince (1981) rightly observes that although the notion of given versus new figures prominently in much linguistic literature 'this intuitively appealing notion has never received a satisfactory characterisation that would enable a working linguist not only to invoke it but to actually put it to use' (Prince, 1981: 225). If one considers the definitions presented thus far, Prince continues, one finds that the notion of givenness has, in fact, been defined at at least three levels. Thus, on a narrow level, givenness has been defined on the basis of 'saliency', whereby given information is 'that knowledge which the speaker assumes to be in the consciousness of the addressee at the time of utterance' (Chafe, 1976: 30). A second, somewhat broader level is that of givenness in the sense of 'predictability/recoverability', according to which given information is that which is presented by the speaker as 'recoverable from some source or other in the environment -- the situation or the preceding context' (Halliday and Hasan, 1976: 326; cf. Kuno, 1978). Brown and Yule's (1983: 80) notion of 'activated' (i.e.

introduced in previous discourse), and Hannay's term 'discourse-bound', which relates to the given setting, also fall under this rubric.

Prince, however, chooses to base her taxonomy on an even broader level of givenness, whereby information is presented as given if, at the time of utterance, it is assumed to belong to (or to be inferrable from) the 'shared knowledge' of speaker and hearer. Thus Prince adopts the Clark and Haviland (1977) notion of givenness (which she then calls 'Assumed Familiarity'), the difference being that Prince suggests that instead of the two values given and new, it might be more correct to think of Assumed Familiarity as a scale, on which different types of entities represent different degrees of Assumed Familiarity. Thus Prince distinguishes three basic categories -- those of Evoked, New and Inferrable entities -- each with a number of subcategories. Evoked entities are assumed to be 'familiar' on account of the fact that they have already been introduced into the discourse -- either by textual means (in which case they are Textually Evoked), or by way of the situational context (in which case they are Situationally Evoked). New entities, on the other hand, are being introduced into the discourse for the first time, and may be either Brand New (i.e. newly created, unfamiliar to the hearer) or Unused (in which case the hearer is assumed to be familiar with the particular entity, even if it has not been introduced in the previous discourse). Brand New entities may in turn be 'Anchored'. In that case the NP representing it must be "linked", by means of another NP ... properly contained in it, to some other discourse entity' (Prince, 1981: 236). Apart from Evoked and New entities, Prince distinguishes a kind of 'in-between' class of entities, which she labels Inferrables: 'a discourse entity is Inferrable if the speaker assumes the hearer can infer it, via logical -- or, more commonly, plausible--reasoning, from discourse entities already Evoked or from other Inferrables' (Prince, 1981: 236). A special subclass of Inferrables are the Containing Inferrables, where the information from which the inference is made is properly contained within the Inferrable NP itself. A diagram representing the different categories is given in (13); an example of each category is given in (14) - (20).

(13)



- (14) I wrote a letter to the governor telling him what I thought about him (Brand New Unanchored)
- (15) a. 'Who did you hear it from?'
- b. 'A friend of mine in the police' (Brand New Anchored)
- (16) The Prime Minister is visiting the Soviet Union today (Unused)
- (17) For hours she scrutinized the crossword puzzles without filling in the squares (John Irving, The Hotel New Hampshire) (Noncontaining Inferrable)
- (18) He was very upset by the news that his son had been kidnapped (Containing Inferrable)
- (19) There was an article in the New York Times yesterday about Joseph Heller. Did you read it? (Textually Evoked)
- (20) Hi, I'm Bill. What's your name? (Situationally Evoked)

Now, analysis of an oral narrative reveals, Prince (1981: 245) continues, that there is a 'preferred hierarchy or scale for what type of entity is used', more or less like (21):

(21) **Familiarity Scale**

{E, E<sup>S</sup>} > U > I > I<sup>C</sup> > BNA > BN

The workings of this scale can be explained as follows. A speaker chooses to use an NP representing a certain point on the scale on the basis of his assumptions about what the hearer knows. He cannot choose a type lower without being deviant in some way, nor can he use a type higher without being obscure or ambiguous. Instead a speaker will typically choose to use the correct type of NP, in accordance with the idea of communication as a cooperative action.

Turning back to the idea of a given-new distinction on the basis of shared knowledge, we now clearly see the main difference between this and other levels of givenness. According to Chafe (1976: 30) an NP is given in case it is 'in the consciousness of the addressee' at the time of utterance, i.e. if it is 'already activated'. This means that the referent of the NP must have been explicitly introduced in the discourse or be part of the situational context. Givenness in the sense of predictability/recoverability also requires that the information is 'recoverable from ... the situation or the preceding text' (Halliday and Hasan, 1976: 326). According to Prince's notion of givenness, however, an NP is given if it presents information that is familiar to the hearer, either on the basis of the verbal or situational context (in which case it is Textually/Situationally Evoked), or on the basis of general (long-term) knowledge (in which case it is Unused).

It is this feature of Prince's notion of givenness that allows us to establish a direct link between definiteness-indefiniteness and given-new. According to the pragmatic-cognitive approach of definiteness and indefiniteness proposed in section 3.1, a definite NP can be used if the information presented in that NP forms part of the shared knowledge of speaker and hearer, which includes both 'short-term referential knowledge' (textual and situational) and 'long-term referential knowledge', which relates to the (real or imaginary) world in general (see Dik, 1986: 15). An indefinite NP can be used if the information presented in that NP does not belong to the shared

knowledge of speaker and hearer. In other words, the function of definiteness and indefiniteness is to inform the hearer about the given-new status of a particular NP. If, however, one accepts this relation between on the one hand the use of definiteness and indefiniteness and on the other the given-new status of an NP, one may logically expect the various usage types of the definite article (as distinguished by Hawkins and Christophersen) to correspond to the different types of discourse entities on Prince's Familiarity Scale. Comparison shows that this is indeed the case:

Hawkins (1978), (Christophersen, 1939)		Prince (1981)
Anaphoric Use (Explicit Textual Basis)	a book - the book a lathe - the machine	Textually Evoked
Immediate Situation Use	Beware of <u>the</u> dog	Situationally Evoked
Larger Situation Use (Situational Basis)	in a town: the church the pub in a country: the government The Prime Minister	Unused
Associative Anaphoric Uses (Implicit Textual Basis)	a book: the author the pages a house: the door the roof	Noncontaining Inferrables
Unfamiliar Uses	the woman who went out with him last night the bottom of the sea the fact that there is so much life on earth the colour red the first person to sail to America	Containing Inferrables

The indefinite article(s) will be used to represent Brand New entities (Anchored or Unanchored) (see examples (14) and (15)).

We have now seen how in Prince's taxonomy the given-new distinction is presented as a scale rather than a binary distinction. We have also seen that there is a direct link between the types of NP distinguished in this taxonomy and the various uses of definite and indefinite NPs. Consequently, the step to the idea of definiteness and indefiniteness as a scale rather than a strict dichotomy is a logical one. In the next section we will therefore propose a scale of definiteness (based on Prince's Familiarity Scale) on which various types of NP will



be distinguished on the basis of the status of the information presented in the NP with regard to the shared speaker-hearer knowledge (known, unknown or inferrable), and the type of knowledge on basis of which the information can be assumed to be known or inferrable (textual, situational, general).

#### 4. A SCALE OF DEFINITENESS AND INDEFINITENESS

The scale of definiteness and indefiniteness to be developed in this section is based on Prince's Familiarity Scale in that it adopts the basic distinction between Evoked, Inferrable and New NPs. Thus an NP presenting Evoked information will be assigned definiteness status: it presents information that can be assumed to be identifiable for the hearer on the basis of textual, situational or general knowledge. NPs presenting New information, on the other hand, are indefinite: they contain information that is assumed to be unidentifiable for the hearer. In between these two classes there is the class of Inferrable NPs. These NPs are not definite, since they present information that is not identifiable, i.e., information that does not belong to the speaker-hearer shared knowledge. However, they are not indefinite either: although the information they present is not really part of the hearer's (long-term or short-term) referential knowledge, it is still inferrable from that knowledge. Inferrable NPs are, as it were, 'indirectly' identifiable for the hearer on the basis of a 'relationship of inference' (Hannay, 1985: 57, cf. Clark and Haviland's (1977) 'inferential bridge'), which may take various forms (part of/member of/subset of etc.). Whether or not it is appropriate to use an Inferrable is again dependent on the assumptions a speaker makes about what the hearer knows: on the basis of his long-term knowledge the hearer must be able to establish, without too much difficulty, the relation between something he already knows and the Inferrable NP.

To suit our purposes, however, Prince's Familiarity Scale needs to be modified in several respects. The first modification we propose concerns Prince's class of Unused NPs, and has, in fact, already been suggested in the preceding section. There we saw that, according to the Familiarity Scale as well as to Prince's definition of Unused entities as entities already present in a hearer's 'own model', which simply have to be placed in the 'discourse model' (Prince, 1981: 235), Unused NPs have a high degree of Familiarity. Yet Prince classifies Unused NPs as New on account of the fact that they are being introduced into the discourse for the first time. In view of the fact that both Prince's Familiarity Scale and our own definition of definiteness are based on the notion of givenness in terms of shared knowledge, rather than on the narrower notion of givenness with respect to the verbal or situational context, it may, however, be more correct to regard Unused NPs as just another kind of Evoked NP. After all, Textually Evoked, Situationally Evoked and Unused NPs are all definite in that they present information that is 'familiar'; they merely differ with regard to the kind of knowledge appealed to (textual, situational or general). From now on we will, therefore, use the more revealing term Generally Evoked (E<sup>G</sup>) to refer to what Prince labelled Unused NPs.

A second modification of Prince's Familiarity Scale concerns

the difference in degree of familiarity between Textually, Situationally and Generally Evoked NPs. According to the Scale, NPs presenting Textually Evoked information and NPs presenting Situationally Evoked information are equally familiar, whereas Generally Evoked (Unused) NPs have a slightly lower degree of familiarity -- no doubt on account of the fact that in the case of a Generally Evoked NP the information has to be placed from a hearer's own model into the discourse model. However, there seems to be evidence to suggest that there is a difference in familiarity (c.g. definiteness) status between Textually and Situationally Evoked NPs as well. Thus Rochester and Martin (1977: 260) present a 'Retrieval Wheel' showing the appropriate strategies for recovering referents for 'definite' NPs, according to which, to identify a referent, a hearer first searches the explicit verbal context of the utterance; only if the referent of the NP cannot be retrieved from the verbal context will an appeal be made to the situational context. In other words, Textually Evoked NPs are more 'directly identifiable' than Situationally (or Generally) Evoked NPs. This fits in entirely with Cruse's (1980: 312) idea of an 'order of precedence' among the various usage types of 'definite' NPs, whereby the ranking seems to be Anaphoric ( $E^T$ ) -- Immediate Situation ( $E^S$ ) -- Larger Situation ( $E^G$ ). This means that 'where, in a given situation, different usage types would select different referents, the highest-ranking type wins out, and suppresses the others', and consequently that 'a successful reference using a lower-ranking usage type is possible only if there are no higher-ranking competitors' (Cruse, 1980: 312). Consider the following sentences:

- (23) S: Frank next door has bought a young bulldog (a). I wouldn't come near the creature if I were you (b).
- (24) a. In St Paul's Cathedral:  
That's the choir over there. Have you visited the tower yet?
- b. In London:  
Have you visited The Tower yet?

Imagine S(peaker) and H(earer) entering S's house, where they are welcomed by S's dog. Despite the fact that there is a dog both in the preceding text and in the immediate situation, sentence (b) is normally not considered ambiguous: H simply chooses the most direct way to identify the referent of the NP the creature, which means that he interprets it as referring to Frank's young bulldog. If, however, S had only uttered sentence (b), H would have interpreted the NP the creature as referring to S's own dog, in which case the NP would have been Situationally Evoked. The same holds for example (24): only if the referent of the NP the tower cannot be retrieved from the situational (or, of course, verbal) context, will the hearer appeal to his general knowledge to identify the referent. Thus we may conclude that of the different types of Evoked NPs Textually Evoked NPs have the highest degree of definiteness in that the information they present is most directly identifiable. Generally Evoked NPs have the lowest degree of definiteness (within the class of Evoked NPs): an NP will only be interpreted as a Generally Evoked NP if its referent(s) cannot be selected from the text or the situation.

What is interesting is that, as Cruse (1980: 312) observes,

Inferrables may also take precedence over Situationally and Generally Evoked NPs. Thus the NP the tower in (25) is most likely to be interpreted as the tower of York Minster, even if the utterance is made in St Paul's Cathedral or anywhere else in London:

- (25) I hear you were at York Minster last week. Did you visit the tower?

This, however, is not really surprising. After all, Inferrables are also evoked, albeit in an indirect way, and may as such also be textually evoked -- thus taking precedence over Situationally and Generally Evoked NPs. This does not mean, however, that Inferrable NPs as a class have the same degree of definiteness as Textually Evoked NPs. The fact remains that, whereas Evoked NPs are directly identifiable from the text, situation or larger situation, Inferrables are only indirectly identifiable: referent identification is only possible through the establishment of a relationship of inference between the Inferrable NP and the hearer's textual, situational or general knowledge. Since the establishment of such a relation may be assumed to take time, one might expect that it takes a hearer longer to comprehend sentences containing an Inferrable NP than that it takes him to comprehend a sentence containing only Evoked NPs -- which indeed turns out to be the case (Clark and Haviland, 1977: 21). This also explains why it is that the number of Evoked NPs in a text is normally much higher than the number of Inferrable NPs (Rochester and Martin, 1977; Van Dijk and Kintsch, 1983): use of too many Inferrables would require too much 'bridging' on the part of the hearer, and would consequently diminish the comprehensibility (readability) of a conversation (text).

The third modification to Prince's Scale we suggest involves the distinction of two more types of Inferrables. As we saw Prince distinguishes two types of Inferrables: noncontaining and containing. We also saw that Hawkins' NPs with an NP-complement (the fact that there is so much life on earth) belong to the class of Containing Inferrables, since the NP is identifiable on the basis of information contained within the NP. Now, consider the following examples:

- (26) The problem was that no one supported his views  
 (27) The fact was that there was so much life on earth

Sentences like these are, according to Hawkins, parallel to Inferrable NPs like the problem that X and the fact that X, since in both cases the information provided is new in that it does not as yet belong to the shared speaker-hearer knowledge, and, at the same time, identifiable because it can be inferred from subsequent information (Hawkins, 1978: 141/142). In other words, the definiteness status of the problem that X is, according to Hawkins, similar to that of the problem is that X. Nevertheless there seems to be a difference between Containing Inferrables (in general) and NPs like the problem in structures like the problem is that X. For whereas it is not possible to say \*problem that X or \*fact that X it is quite acceptable (in spoken English) to say problem is that X, fact is that X (chances are, odds are). And although the absence of the definite article does not actually affect the definiteness status of the NP in question (it is still

identifiable on account of subsequent information), the fact that it can be deleted may suggest that the Inferrable NP in the problem is that X must be considered less identifiable -- less definite -- than the Inferrable NP the problem that X. Moreover, although Hawkins considers the problem that X and the problem is that X to be 'pragmatically equivalent', the latter is not a Containing Inferrable according to Prince's definition, since what is inferred off of is not properly contained within the NP itself. We therefore propose to distinguish a third subtype of Inferrable NP, that of the 'Predicational' Inferrables (I<sup>P</sup>), where the information presented in the NP is identifiable on account of information provided in the subsequent predicate. This type of Inferrable, which includes NPs like the problem, the fact, the conclusion, the belief, the point etc. in structures like the problem is that X (and when not used as Evoked NPs or as Noncontaining Inferrables), will then occupy one position lower on the Definiteness Scale than the Containing Inferrables.

It seems, however, that there is need for even a fourth type of Inferrable NP. In Prince's analysis of an informal oral narrative (Prince, 1981: 240), the partitive construction one of them is classified as a Noncontaining Inferrable: the particular person in question can be inferred from an already evoked set of persons (the women). However, in Hannay (1985a: 52) the partitive some of them is presented as a Containing Inferrable on account of the fact that the NP from which the inference is made (my chips -- them) is properly contained within the Inferrable NP itself. What we suggest, therefore, is that partitive constructions belong to neither the Noncontaining nor the Containing Inferrables; the reason being that whereas they obviously have something in common with the other types of Inferrables -- namely that they are inferrable from ('part of') some identifiable set -- they also differ from these other types in an important respect. As we have seen, Noncontaining, Containing and Predicational Inferrables are all identifiable, in an indirect way, within the speaker-hearer knowledge. This means that after having established a relationship of inference the hearer actually knows which object is being referred to. Partitive constructions, on the other hand, are used to refer to some unidentifiable part, member or subset of an identifiable set (Dik, 1974; Hawkins, 1978), which is why, within the FG framework, they are given the term operator i in their underlying representation (Brown, 1985). Thus even more than the other types of Inferrables, partitives contain an indefinite element: not only are they inferrable rather than evoked, but on top of that they are not even fully identifiable. Partitives must therefore be seen as a hybrid form: on the one hand they contain a definite element (the set from which the inference is made); on the other hand they clearly contain an indefinite element (the unidentifiable part/member/subset). In FG terms this means that instead of either the term operator d or the term operator i, the underlying representation of a partitive should contain both, in which case the NP one of the women would be represented as follows:

(28) (i1/dmx<sub>i</sub>: woman (x<sub>i</sub>))

(where 1 and m indicate singular and plural respectively).

It is important to realise, however, that not only

'explicit' partitives like one of the/some of the fall under the category of 'Partitive' Inferrables (I<sup>PART</sup>). In examples (6)-(12) we already saw that stressed some, as well as NPs with a possessive determiner (especially those containing a relational noun), and even NPs with the definite article, may function as partitives in that they do not refer (inclusively) to an identifiable set, but (exclusively) to an unidentifiable part, member or subset of an (implicit) identifiable set. Thus in (6a), (12c) and (11c) (repeated here for convenience) sóme salesmen refers to an unidentifiable subset of a particular set of salesmen ('some but not others'); his arm refers to one of a set of two arms ('one of his arms'); and the stones refers not to all, but merely some of the hailstones of a particular hailstorm:

- (6) a. Sóme salesmen walked in  
 (12) c. He fell off his bike and broke his arm  
 (11) c. There was a terrible hailstorm. The stones were so large they smashed various windows.

Apart from these, also NPs with the determiner such (a) would come in the category of Partitive Inferrables. In Zandvoort (1945: 186) we read that "'such" may be classed with the demonstrative pronouns...; it indicates kind or degree'. Thus in the following examples the underlined NPs might be considered definite inasmuch as they refer to a particular kind of man and fright respectively:

- (29) Such men are dangerous  
 (30) She had such a fright that she hardly survived it

At the same time, however, such (a) contains an indefinite element, which will become clear if we take the underlined NPs in (29) and (30) to be pragmatically equivalent to expressions like

- (29') men like that/men like him  
 (30') a fright like that/a fright like the one she had

where the demonstrative pronoun that and the NPs him and the one she had refer to an identifiable kind of man or fright, whereas the NPs men and a fright refer to an unidentifiable object or set of objects of that particular kind. In other words, NPs containing the determiner such (a) refer simultaneously to an identifiable type and an unidentifiable token (set of tokens) of that type, comparable to the way in which partitives refer to an unidentifiable part/member/subset of an identifiable set. Here, too, the term operator i/d will be used to indicate this ambiguity in the definiteness status of the NP.

A final adaptation of Prince's Scale concerns the New NPs. Since Unused entities are no longer considered to belong to the category of New NPs, we can simply distinguish between Brand New and Anchored NPs. Both these types are indefinite in that they are being introduced into the knowledge of the hearer, the difference between them being that Anchored NPs are still 'linked' in some way or other to Evoked Information. This might raise the question what the difference is between such Anchored NPs and the Partitive Inferrables, as they both seem to contain a definite as well as an indefinite part. Let us try to answer this question by illustrating the difference in use between the two

categories. Imagine a speaker (S) and a hearer (H) at the beginning of a conversation. Now, in the given situation it appears that S is more likely to use (31) than (32) (Mike Hannay, personal communication):

- (31) A friend of mine called yesterday  
 (32) One of my friends called yesterday

This may well be accounted for by the fact that (31) and (32) differ with respect to the assumptions made by S concerning the way in which H will interpret the utterance. Thus, the use of a partitive construction like one of my friends suggests that the set of objects referred to by the NP my friends must somehow already be Evoked -- which, in the particular situation, is rather unlikely. Use of the NP a friend of mine, on the other hand does not require any identifiable set of friends -- it introduces an entirely new, unidentifiable object, the Anchor of mine merely providing the additional information that the person referred to is a friend of S's, thus restricting the number of possible referents. Therefore, whereas the partitive one of my friends will contain the term operator i/d in its underlying presentation, the NP a friend of mine, presenting new information, will simply contain the term operator i.

After the proposed modifications, the scale of definiteness and indefiniteness may be represented as in (33).

(33)

	Evoked	Inferrable				New
Text.	E <sup>T</sup>	I <sup>NC</sup>	I <sup>C</sup>	I <sup>P</sup>	I <sup>PART</sup>	NA
Sit.	E <sup>S</sup>	I <sup>NC</sup>	I <sup>C</sup>	--	I <sup>PART</sup>	NA
Gen.	E <sup>G</sup>	--	--	--	I <sup>PART</sup>	NA

} BN

Although it has the form of a matrix, (33) reads like a scale: the degree of definiteness decreases from top left position to bottom right position.

We see from this scale that we not only distinguish between Textually, Situationally and Generally Evoked NPs, but also between NPs that are inferrable from or anchored in the textual, situational or general knowledge of the hearer. Thus, NPs like his sister, one of his sisters and a sister of his are used situationally if his is used deictically. Likewise NPs like one of the Members of Parliament and a close friend of the President's are inferred from/anchored in Generally Evoked information (the Members of Parliament, the President). Naturally such a distinction cannot be made with respect to Brand New NPs, as these are not in any way related to the knowledge of the hearer.

## 5. CONCLUSIONS

### 5.1 General conclusions

The approach to definiteness and indefiniteness proposed in this paper has a number of advantages. The first results from the fact that it dispenses with the idea of the definiteness-indefiniteness distinction as a binary distinction, and instead sees definiteness and indefiniteness in terms of a scale on which the different usage types of definite and indefinite NPs are placed according to their degree of definiteness. In this way both the similarities and the differences between the various types of 'definite' and 'indefinite' NPs can be accounted for. What all the traditionally definite NPs have in common is that the information they present either belongs to, or is inferrable from, the shared speaker-hearer knowledge, and that as such they tend to appear towards the left end of the Scale (as Evoked or Inferrable NPs). What unites the so-called indefinite NPs is that they present information that is unknown to the hearer, and as such appear toward the right end of the Scale, either as New NPs or as Partitive Inferrables.

At the same time, however, the difference between the various types of 'definite' and 'indefinite' NP as listed in section 1 becomes clear. Thus demonstratives, which are identifiable on account of the fact that they contain information concerning the deictic location of the object referred to, can be either Textually or Situationally, but not Generally Evoked. Furthermore they can be used as Inferrables (that man we saw yesterday, I<sup>C</sup>; I never read 'Humboldt's Gift', but I have read other books by that author, I<sup>N</sup>), but never I<sup>P</sup> or I<sup>PART</sup>. NPs with a possessive determiner are also restricted in use: like the demonstratives they can never be Evoked on the basis of (or Inferred from) general (long-term) knowledge: the information contained in the possessive determiner must relate to some object within the verbal or situational context. The same holds for personal pronouns: since they provide but little information in themselves -- they are distinguished only for gender and number -- they can only be used to refer to objects identifiable on the basis of the hearer's short-term knowledge. Moreover, since pronouns combine only in a limited way with modifiers, they usually only occur as Noncontaining Inferrables (?he who/\*it which we saw yesterday, I<sup>C</sup>; Bill is a nice guy all right, it's her I don't like, I<sup>N</sup>). Proper names, which have 'unique reference' (Quirk et al., 1972: 160; Christophersen, 1939: 62), are typically used as Generally Evoked NPs, but can, of course, also be used as Textually or Situationally Evoked NPs, or as Noncontaining Inferrables (John and Bill came to see me yesterday. Fred's just acquired a new car; Hannay, 1985a: 54). NPs with the definite article, finally, are least restricted in their use, due to the fact that they only indicate to the hearer that the object referred to is assumed to be identifiable (directly, indirectly or partially), without providing additional information indicating the ground on which this assumption is made.

However, the Definiteness Scale developed in the preceding section shows even more; it not only shows that definiteness and indefiniteness must not be seen as a strict dichotomy, but it also shows that it is impossible to draw a line between those

usage types that are 'more or less' definite and those that are 'more or less' indefinite. In the first place there is of course the in-between class of Inferrable NPs, which are not actually definite, since they do not present information that already belongs to the shared speaker-hearer knowledge. Nevertheless, they show a strong affinity to the (more definite) class of Evoked NPs in that they are, after all, identifiable -- albeit in an indirect way. In addition, however, there is the (sub)class of Partitive Inferrables, which actually contain both a definite (identifiable) and an indefinite (unidentifiable) element. Thus, although it is true that the so-called 'definite' NPs appear towards the left end of the Scale, as Evoked or Inferrable NPs, whereas the 'indefinites' appear at the right end, it is not possible to draw the dividing line between definite and indefinite: there still remains an area where the two overlap.

This, then, also shows that there is not always a direct relation between the form of an NP (as traditionally definite or indefinite) and the way in which it is used. Thus so-called definite NPs can be used not only to present information that is identifiable (either directly or indirectly) on the basis of different kinds of knowledge, but, in the case of NPs with the definite article or a possessive determiner, also to present information that is, in fact, only partially identifiable ( $I^{PART}$ ). Likewise it is possible for an 'indefinite' NP like some to present information that is only in part unidentifiable. This, however, should not be seen as a problem: it may still be correct to think of NPs with the definite article, demonstratives, possessives, proper names and pronouns as 'definites', since they are typically used to present information which is identifiable, or which at least contains an identifiable element; NPs with the indefinite article or some, as well as partitives may still be thought of as 'indefinites', as they are all used to present information that is -- at least in part -- unidentifiable. All it shows is that one particular form may be used in more than one way, and that in its various uses it may represent different degrees of definiteness and indefiniteness.

## 5.2 Implications for FG

Naturally, all this is going to have consequences for the way in which definiteness and indefiniteness are defined and represented in FG. In section 4 we already suggested that the two existing term operators, d and i, do not suffice, and that, in order to be able to express the definiteness status of a partitive like one of the women, which contains both an identifiable and an unidentifiable element, we would need a third term operator, i/d. If, however, we moreover accept that there need not always be a direct relation between the form of an NP (as traditionally definite or definite) and the way in which it is used (as identifiable (directly or indirectly), partially identifiable or unidentifiable) and that, in fact, one particular form may in its various uses represent different degrees of identifiability, it will be clear that changes are needed not only with regard to the term operators, but also with regard to the expression rules, which form the link between term operators and the surface form of the NP.

In FG, expression rules 'determine the way in which



functional structures [represented in fully specified predications] are mapped onto the syntactic structures of linguistic expressions' (Dik, 1978: 20); in other words, they determine the form and the order of the constituents. With respect to definiteness and indefiniteness the expression rules are very straightforward (Dik, 1980):

- (34) d     ->    $\emptyset$  \_\_\_ P<sub>NPROP</sub>  
           the
- i     ->   a(n)/ \_\_\_<sup>1</sup>  
            $\emptyset$

Obviously these expression rules need to be changed in a number of ways. First of all we will need a rule to link the newly created term operator i/d to partitive expressions:

- (35) i/d -> one/some of the

Expression rules of this form, however, still suggest that there is a one-to-one relationship between the surface form of an NP and its underlying representation, which, as has been shown in the preceding sections, is not the case. This means that the expression rules need to be revised in such a way that they account for the fact that, depending on how it used, one particular NP may have various degrees of identifiability, and thus need not always be represented by one and the same term operator.

It will be clear that the scope of this paper does not allow us to provide a detailed proposal for the revision of these expression rules. A few examples and suggestions, however, will suffice to indicate the kind of revision needed.

To start with, it is not only proper names and NPs with the definite article that have the definite term operator d in their underlying representation. Since d indicates that the referent of the NP is assumed to be identifiable (either directly or indirectly), it will also appear in the underlying representations of other 'definite' NPs: pronouns and NPs containing a demonstrative or a possessive. Of these pronouns and NPs containing a possessive will merely have the term operator d in their underlying predication, which in combination with one or more restrictors will lead to the correct surface form. NPs containing a demonstrative, on the other hand, will be represented by means of a special term operator, which is not only specified for identifiability, but also for proximity by means of the term operators +p and -p (Dik, 1978: 61):

- (36) (d+plx<sub>i</sub>: man (x<sub>i</sub>)) : this man  
       (d-plx<sub>i</sub>: man (x<sub>i</sub>)) : that man  
       (d+pmx<sub>i</sub>: man (x<sub>i</sub>)) : these men  
       (d-pmx<sub>i</sub>: man (x<sub>i</sub>)) : those men

The indefinite term operator i will be used to indicate that the referent of an NP is not assumed to be identifiable for the hearer. This means that apart from NPs with the indefinite article and the zero article it will appear in the underlying predications of NPs containing numerals or such quantifiers as some (unstressed), many (much), few (little), a lot of, a number

of etc., which might be represented as follows:

- (37) (i1x<sub>i</sub>: student (x<sub>i</sub>)) : a student  
 (imx<sub>i</sub>: student (x<sub>i</sub>)) : (some) students  
 (i2x<sub>i</sub>: student (x<sub>i</sub>)) : two students  
 (many imx<sub>i</sub>: student (x<sub>i</sub>)) : many students  
 (few imx<sub>i</sub>: student (x<sub>i</sub>)) : few students  
 (for further details see Dik, 1978: 61; Brown, 1984).

The third, and most interesting term operator (i/d) is that used to represent partitive NPs, i.e. NPs that are only partially identifiable (I<sup>PART</sup>). Such NPs may take many forms, as they usually combine various definite and indefinite determiners (represented by d and i respectively):

- (38) (i1/dmx<sub>i</sub>: child (x<sub>i</sub>)) : one of the children  
 (im/dmx<sub>i</sub>: child (x<sub>i</sub>)) : some of the children  
 (many im/d+pmx<sub>i</sub>: child (x<sub>i</sub>)) : many of these children  
 (i2/dmx<sub>i</sub>: child (x<sub>i</sub>) : my (x<sub>i</sub>)) : two of my children  
 (where 'my (x<sub>i</sub>)' is an abbreviation for a longer restrictor indicating possession)

As we have seen, however, partitives need not always be explicit but may also be implicit, in which case it is not the form of the NP but its use that determines its definiteness status. Thus an NP with the definite article may either be represented by the definite term operator d, or the partitive term operator i/d, depending on whether that NP is used to refer to an Evoked or to an Inferrable (I<sup>PART</sup>) entity (examples (7) - (10)). Similarly, NPs with a possessive determiner will typically be identifiable, in which case they will be represented by the definite term operator d, but as appears from examples (2) - (4) such NPs can also function as partitives, in which case they will be given the partitive term operator i/d in the underlying predication. NPs containing the determiner some, on the other hand, may present either indirectly identifiable or unidentifiable information (examples (5) and (6)), and may therefore be represented by either the partitive or the indefinite term operator in their underlying predication. Finally there are the NPs with the determiner such(a), which, it was suggested, should also be seen as partitives on account of the fact that they refer simultaneously to an identifiable type and an unidentifiable token of that type (examples (29) and (30)); these NPs may therefore be represented as follows:

- (39) (such i1/dx<sub>i</sub>: child (x<sub>i</sub>)) : such a child  
 (such im/dx<sub>i</sub>: child (x<sub>i</sub>)) : such children

It will have become clear that the pragmatic-cognitive theory of definiteness and indefiniteness proposed in this paper may fit in well with the FG view of definiteness and indefiniteness -- it may, in fact, be seen as an extension of that view. At the same time it will have become clear that the FG theory of definiteness and indefiniteness needs to be modified in at least two ways. First of all a third term operator is needed to express the definiteness status of NPs that contain both a definite (identifiable) and an indefinite (unidentifiable) element. Secondly, a revision of the expression rules seems to be

required. As it evidently would have been beyond the scope of this paper to go into this matter in great detail, we have confined ourselves to making a number of suggestions, and to indicating the kind of revision needed.

#### NOTES

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<sup>1</sup>Christophersen's (1939) Familiarity-unity theory is in principle only concerned with unit- and continue-words and plurals with the definite (the) or indefinite article (a, zero). Apart from these, some attention is devoted to proper names on account of the fact that, although they function as unit-words, they can only occur in zero-form (Christophersen, 1939: 59ff.). As far as the familiarity part of the theory is concerned, however, neither proper names, nor demonstratives, possessives and pronouns are included in the discussion.

<sup>2</sup>Hawkins (1978: 221) allows the exclusiveness condition to disappear with the verbs have, be and a limited number of so-called 'set-existential' verbs like consist, include, install etc. Thus in the following sentences the indefinite NPs actually refer inclusively:

- (1) I have a head
- (2) Britain has a Queen
- (3) There is a Prime Minister in England
- (4) My car consists of a steering wheel, a bonnet, a gear lever etc.

An explanation for these occurrences can in my opinion only be given in pragmatic terms.

<sup>3</sup>Here the term 'information' is used rather than the more commonly used terms 'referent(s)' or 'object(s) referred to' on account of the fact the proposed theory is assumed to apply not only to referential (specific) NPs, but also to non-referential (non-specific, generic, as well as Declerck's (1986) predicational NPs). However, as we will only be concerned in the rest of this paper with referential NPs, all three terms will be used synonymously.

<sup>4</sup>As Clark and Marshall (1981) observe, the term 'shared knowledge' has various definitions. The particular type referred to here is that of shared knowledge (which Clark and Marshall call 'mutual knowledge'), according to which it is not merely the case that A knows X and B knows X, but that A knows that B knows that A knows that B knows etc. that X (in which case a 'one-sided' definition, i.e. either from the vantage point of A or from the vantage point of B, turns out to be sufficient; Clark and Marshall, 1981; 18).

<sup>5</sup>Dik (1986: 14ff) distinguishes between 'knowledge which the system derives from what it perceives in the actual communicative situation' (short-term knowledge, either textual or situational) and 'knowledge which the system possesses independently of the particular communicative situation' (long-term knowledge, either linguistic or non-linguistic). However, in order to fully explain the use of definite and indefinite NPs, it is sometimes needed to take into consideration not only what the speaker assumes he and the hearer know (believe or assume), but also the speaker's goals, attitude, motivation and interests at the time of utterance (cf. Van Dijk and Kintsch, 1983). Within the scope of the present article we will, however, only be concerned with the former type of knowledge, i.e. textual and situational (short-term) knowledge, and general (long-term) knowledge.

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