Preface

The objective of workpackage 1.4 was to develop a functional view on NP-anaphors, based on discourse analysis and experimental evidence on the actual processing of NP-anaphors. Subtask 1.4.2b, 'The perspectival nature of indefinite noun anaphors' was aimed at experimentally testing the inferential nature of indefinite noun anaphors that signal a shift in perspective. Such indefinite expressions are used to refer to a character in the text that has already been mentioned, but is re-introduced from a different point of view. In order to interpret the indefinite 'anaphor' coherently, the reader has to make the inference that the character introduced in the perspectival subdomain is identical to the character that has already been mentioned, but is presented from a different point of view (see deliverable R1.4.1).

It was predicted that this inference would lead to longer reading times for sentences containing an indefinite noun anaphor, compared to the same sentence containing a definite noun anaphor. Furthermore, it was predicted that the availability of the intended referent would be lower immediately after the indefinite noun anaphor than after the definite noun anaphor, because the extra referential inference for the indefinite noun anaphor requires extra processing time.

In order to test these hypotheses, textual materials have been carefully constructed and tested by means of several experimental paradigms, including the measuring of reading times and of probe recognition latencies for several kinds of probes. About ten different experiments were run in the course of one and a half year.

These experiments did not show any difference between the processing of definite and indefinite noun anaphors. However, it could not be concluded that there really was no difference, because the control conditions that had been included in the experiments in order to test the validity of the experimental paradigms did not show any effect either. Therefore, the experimental paradigms did not provide insight into the processing of indefinite noun anaphors. Consequently, a deliverable reporting the unsuccessful attempts would not have been a valuable contribution to the project.

Still, it was clear that indefinite noun anaphors must require extra inferential processes. Hence, a return to text-analytic investigations was considered both necessary to investigate more carefully the exact nature of inferences required by indefinite noun anaphors, and a more useful contribution to the objectives of Dandelion.

The present deliverable presents the results of those investigations. It contains a more suitable theoretical framework than was outlined in deliverable R1.4.1., and a more specific description of indefinite noun anaphors that may signal a shift in perspective, as well as other kinds of indefinite noun anaphors that are marked.

The detailed description of the conditions for the use and interpretation of indefinite noun anaphors is useful for the construction of experimental materials.

Since we have not yet developed a suitable experimental paradigm, however, the evidence from cognitive processing is still open for investigation outside Dandelion.

1 Introduction

(In-)definiteness of referential expressions has been a research topic for quite some time in philosophy, logic, linguistics, and related areas. In most studies, theories are based on or refuted by constructed examples. These examples usually contain definite or indefinite expressions that are used either grammatically or not. As a consequence, indefinites that are used in a special way have seldom been studied. The aim of this paper is to offer an explanation of the use and interpretation of such indefinite expressions by studying English and Dutch indefinites in actual written contexts.

In discussing this type of indefinites, we will take a cognitive pragmatic perspective. We will assume that (in-)definiteness is not primarily a question of logico-semantics but a question of pragmatics, based on the assumptions of the speaker (or writer) about the cognitive discourse model of his recipient, or to more precise, his assumptions about the knowledge of the recipient concerning the intended referent. Definite and indefinite expressions each have a cognitive function, which is to help the recipient in identifying the intended referent. The expressions may still have a logical meaning, but in discourse this meaning is supplied by pragmatic meaning aspects.

The importance of pragmatics is of course not new; Christophersen (1939), Strawson (1950), Searle (1969), and Hawkins (1978, 1991) have all stressed that logical meaning is not sufficient. What ís relatively new in our approach is that the functions of definite and indefinite expressions in discourse are heavily based on cognitive pragmatic factors. Indefinites form a case in point here, because these expressions can express a variety of different meanings, which can be shown to stem from one single cognitive discourse function (see 2.2).

We will also assume that both definite and indefinite expressions are capable of 'referring' to a cognitive relevant concept. Our use of the term 'reference' is not to be interpreted in a strictly (formal-)semantic sense; instead, we will define it as the function of an expression in the discourse of identifying individuals or objects which may but need not be present in either the knowledge base of the speaker or the knowledge base of both speaker and hearer. The terminology used here is thus cognate with functional linguistic theories like Dik (1989).

Referential expressions in our sense can be used to introduce (mental) entities into the discourse as well as to refer to them anaphorically. This holds for both 'referential' and quantificational expressions in the logico-semantic sense. For indefinites, we assume that specific as well as non-specific and generic indefinites can

introduce or corefer to discourse referents. These discourse referents represent either specific objects, arbitrary members of classes of objects, or whole classes of objects.

Reference as a discourse function is to be distinguished from predication as a discourse function. Predicative expressions do not refer to discourse referents but predicate properties of them. Indefinites that are used to predicate do not refer to referents in order to establish them as a discourse referent. Instead, they are used to predicate a property of an already present referent. A typical grammatical construction in which a predicational indefinite occurs is a nominal predicate, as in for instance *Bill is a nice boy*. The indefinite expression is used here to predicate the property 'nice boy' of the discourse referent Bill.

In this article we will discuss a special type of indefinites that have a referential function in the discourse. These indefinites are special because they do not introduce a referent into the discourse, as is often assumed to be a standard function of indefinites. Instead, they are coreferential with a former expression in the discourse. We regard this function of indefinites as marked. Consider for instance the following example (small capitals and italics are ours):

(1) For several years, Mrs. H.T. Miller had lived alone in a pleasant apartment. [..] She was a widow. [..] She had no friends to speak of. [..]
Then she met MIRIAM. It was snowing that night. Mrs. Miller had finished drying the supper dishes and was thumbing through an afternoon paper when she saw an advertisement of a picture playing at a neighborhood theater. The title sounded good, so she struggled into her beaver coat [..] and left the apartment. [..]
A long line stretched in front of the box office; she took her place at the end. [..] The line seemed to be taking its own time and, looking around for some distraction, she suddenly became conscious of *a little girl standing under the edge of the marquee*.
Her hair was the longest and strangest Mrs. Miller had ever seen. [..]
(Truman Capote, 'Miriam', in Contemporary American Short Stories; cited in Ushie, 1986)

Instead of introducing an entirely new discourse referent, the indefinite expression in italics refers to the discourse referent 'Miriam', which has already been mentioned. By using an indefinite expression nevertheless, it is signalled that this referent is reintroduced into the subordinated perspective of a character in the text, i.e., that of Mrs. Miller. From Mrs. Miller's point of view it is the first time she sees Miriam and the indefinite noun phrase signals the introduction of this referent into her consciousness. Still, the reader has reasons to believe that the referent of the indefinite noun phrase is identical with the discourse referent mentioned before. This perspective-signalling function of indefinites has been observed by for instance Hinds (1977), Du Bois (1980), Ushie (1986), Wiebe (1991), and Sanders (1990, 1994).

Another example of a marked indefinite expression that is not first and foremost used to introduce a new referent into the discourse is the following:

(2) [De hoofdpersoon, een vrouw, reist per trein door Tsjechoslowakije. Ze deelt een coupé met een aantal mensen, onder wie enkele zigeuners met een baby. Een spoorwegbeambte komt binnen en beveelt hen de coupé te verlaten.]

Daarop zette hij zijn borst uit en bedolf ons onder het gewicht van zijn dienstmededeling. Dit was een moeder-met-kindcoupé. 'Raus!' vatte hij de situatie samen. 'Alle: Raus!' En terwijl de Slowaken, de zigeunerinnen, de baby en ik nog bezig waren het vertrek te ontruimen, kwam DE MOEDER er al aan. *Een mooie jonge vrouw* haastte zich met nietsziende ogen, haar kind tegen zich aangedrukt, langs ons heen om zich ondanks de beproevingen van de reis aan haar moederschap te wijden.
(M. de Moor, 'Eerst Grijs Dan Wit Dan Blauw', Amsterdam: Uitgeverij Contact, p. 237)

[The main character, a woman, is travelling by train in Czechoslovakia. She shares a train compartment with some people, including gipsies with a baby. A railway officer comes in and orders them to leave the compartment.]
After that he thrust out his chest and buried us under the weight of his official announcement. This was a mother-and-child compartment. 'Raus!' he summarized the situation. 'Alle: Raus!' And while the Slovaks, the gipsies, the baby and I were still clearing the compartment, THE MOTHER was already arriving. *A beautiful young woman* hurried past us without looking, her child pressed against herself, to devote herself to her motherhood despite the harassments of the journey.

In (2) the indefinite expression in italics is used to refer to the mother introduced in the preceding sentence. The indefinite noun phrase seems to be used here to predicate properties of a particular discourse referent.

In both examples, the indefinites turn out to refer to a formerly established discourse referent. The reader has to either identify the discourse referent of the indefinite noun phrase as the previously established one, or directly represent the former discourse referent in the representation of the current sentence. In either case, some inference must be made. It is not sufficient to introduce a new referent into the text representation, as is assumed to be the standard function of an indefinite noun phrase by for instance Kamp (1981) and Heim (1982). These theories are not capable of dealing with marked indefinites as they are, because marked indefinites require the establishment of some relationship between the referent of the indefinite noun phrase, and an already existing referent. In our view, these indefinites require a special interpretation procedure, which is induced by the combination of the indefinite form and the current text representation.

We will argue that these indefinites are marked because they violate the conventions for the use of indefinite expressions. These conventions are part of a more general pragmatic principle for the use of referential expressions to the effect that the form of a referential expression should be chosen on the basis of the knowledge about the intended referent available to the recipient. In the case of marked referential expressions, this principle is violated by the speaker or writer in order to convey additional information that is not primarily referential. In thus exploiting the referential conventions he relies on the recipient to assume that the expression has

to be interpreted as marked and meaningful. It will be argued that the interpretation of marked referential expressions is derived from the conventional function of the marked form actually used.

In section 2 the foundations will be laid for the pragmatic mechanisms that may explain the use and interpretation of marked forms of reference. In section 3 these mechanisms will be applied to marked indefinites in English and Dutch texts.

2 Use and interpretation of marked referential expressions

2.1 Marked forms as exploitations of the referential scale

In various approaches of reference it is assumed that the choice of a referential expression is based on the assumptions of the speaker about the information status of the intended referent to the hearer. The speaker will include just as much lexical information in the referential expression as is needed for the hearer to identify the intended referent. For instance, if a referent has just been mentioned, a pronoun will be sufficient for the recipient to identify it. If the referent has not been mentioned recently, a full noun phrase is required.

In some proposals that argue for a relationship between the form of a referential expression and the cognitive status of the intended referent, the cognitive status of the intended referent is taken as a starting point. It is claimed that the form chosen depends on the accessibility of the referent. This is the case in the *given-new taxonomy* of Prince (1981), and the *givenness-hierarchy* of Gundel, Hedberg, and Zacharski (1989). Other proposals take the form of the referential expression as a starting point and claim that each form signals the cognitive status of the intended referent. In these proposals the referential forms are arranged in a scale according to the amount of lexical content included in the expression. Examples of this view are Lakoff's (1976) *anaphoric hierarchy*, Givón's (1983, 1989) *code-quantity scale of referential predictability*, and Ariel's (1988, 1990) *accessibility marking scale*. The factors that are assumed to determine the accessibility of a referent are for instance recency of mention, competing candidates, and topical status of the referent within the discourse.

With regard to the role of indefinites, these theories are not equally outspoken. Givón (1983) includes logically referential indefinites in the scale as coding the least predictable topic, but in his discussion of the scale in 1989, indefinites are not included. However, Givón (1989) as well as Lakoff (1976) and Ariel (1988, 1990) do not include indefinites because their scales are used to explain definite anaphoric reference. In contrast, Prince (1981) and Gundel e.a. (1989) do include (referential) indefinites. Prince claims that indefinites are used to refer to new discourse referents for which a slot has to be created in the text representation; Gundel e.a. claim that

indefinites are used to refer to referents that are type-identifiable, by which they mean that the speaker can justifiably assume that the recipient can identify not the entity itself, but the only type of entity referred to.

The idea of a referential scale reflects the pragmatic principle that the form of the referential form matches the current discourse representation of the recipient. In general, this view of reference can be seen as an instantiation of Grice's (1975) Cooperation Principle, particularly the maxims of Quantity, which state that 1) a discourse contribution is as informative as is required, and 2) that it is not more informative than is required.

But Gricean maxims can also be violated. If they are, the speaker has the intention to convey marked meaning by means of an implication that is to be inferred by the hearer. When the hearer has to interpret a linguistic form that deviates from the form that is expected on the grounds of the conversational maxims, he will assume that these maxims are still being observed at a deeper level. Consequently, he will try to infer an interpretation that is meaningful in the particular discourse context.

This mechanism of implying and deriving marked meaning on the basis of the conventions of discourse can also be observed for referential expressions. A referential violation may consist of a referential form that is more informative than is required for the identification of the intended referent on the grounds of the conventions reflected in the referential scale. Still, a deviant form can be used felicitously, and will be interpreted as such by the assumption that the general Cooperation Principle has still been observed by the speaker or writer.

The assumption of Cooperation implies that the marked meaning that is implicated has to be derivable for the hearer. Therefore the inference must be based on some generally applicable principle. For marked referential expressions the meaning can be derived from the conventional meaning of the referential form when used in an unmarked way. Consider the following examples of definite expressions.

(3) a. MR. JONES was walking down the street. HE was carrying a heavy suitcase. HE was on his way to the railway station. *Mr. Jones* was in a hurry.

b. BUSH has decided to raise taxes after all. It is the first time *this president* has dared to do so.

In the last sentence of (3a), a pronoun would have been sufficient to identify the intended referent. The mismatch between the expected referential form and the actually used form, which is a proper name, gives rise to an inference that is based on this discrepancy. The original function of a proper name is to establish a referent that is relatively inaccessible, which usually happens when the referent is re-established over a long distance, or when two or more referents are available as

potential antecedents. In (3a), however, there are no competing candidates, and the relative accessibility is very high due to recency of mention.

A proper way to interpret the marked referential expression would be to apply the original referent-establishing function of a full definite expression to the intended referent anyhow. This means that the sentence containing the marked proper name may be interpreted as the beginning of a new text unit, in which is the referent is re-established as if it were relatively inaccessible. The new text unit represents a new textual theme, which in (3a) probably is Mr. Jones's being in a hurry. Thus the original function of re-establishing a referent due to a theme shift is applied to a referent that is highly accessible and the marked referential expression functions as a text theme shift marker (for full definites as theme shift markers see also Clancy, 1980; Marslen-Wilson, Levy & Tyler, 1982; Vonk, Hustinx & Simons, 1992; Hustinx, in prep.).

Similarly, a demonstrative noun phrase can be used to refer to an already established, highly accessible referent, thereby violating the referential scale assumption (Maes, 1991). Again, the interpretation of the marked referential form can be derived from the original function of the linguistic expression when it would be used according to the referential conventions. In (3b) the referential expression in the second sentence could have been the definite NP *The president* or a pronoun on the grounds of accessibility. Assuming that the original function of a demonstrative expression is to select a referent from an available set of objects, the application of this original function to the intended referent leads to the inference that Bush has raised taxes for the first time in his career, as opposed to *other* presidents, who apparently have done so before.

Both the example of the marked proper name and the example of the marked demonstrative noun phrase show that referential expressions that do not observe the referential scale principle are in fact deliberate violations of the scale. The use of a referential form that is more informative than the form that is predicted by the pragmatic conventions of reference will induce an inference to the effect that the conventional function of the marked expression is applied to the intended referent. Thus the referential scale is exploited in order to imply additional meaning.

At first sight, it seems possible to also explain marked indefinites as violations of the accessibility scale the interpretation of which can be derived from the conventional function of the indefinite form. In order for such an explanation indefinites could be regarded as referential expressions that refer to currently inaccessible referents. As such, indefinites could be seen as situated at the low accessibility pole of a referential scale.

However, the inclusion of indefinites in the referential scale is not as straightforward as it may seem. If one would stick to the claim that the order of referential expressions on the scale depends on the amount of lexical information of the

expression, one would run into the problem that an indefinite expression is not lexically more informative than a definite expression. If one takes the viewpoint that a referential form is chosen on the grounds of the cognitive status of the referent, the problem arises that both indefinite and definite expressions can be used to identify referents that have not been mentioned before. Instead, the choice of a definite or indefinite expression depends on whether the referent is only type-identifiable (in the terms of Gundel e.a.) or uniquely identifiable (as we will argue below). So the cognitive status of the referent in the representation of the preceding discourse is not necessarily different for definite and indefinite expressions.

We propose that the choice of a definite or indefinite referential form is not primarily based on the accessibility of the referent in the current discourse representation, which is what the referential hierarchies have been about till now, but on the status of the referent in any type of knowledge representation, including world knowledge and situational knowledge. Furthermore, the amount of lexical information does not come into play for (in-)definiteness. Still, we propose to explain the implication and derivation of the meaning of marked indefinites as violations of referential conventions that hold for definite as well as indefinite expressions. In the following sections, we will first describe the conventions of the use of (in-)definites in more detail. After that the violation of these conventions will be discussed by presenting examples of marked indefinites in discourse.

2.2 *Conventions for the use of definite and indefinite referential expressions*

In the referential scales, as well as in other theories of reference, the distinction between definite and indefinite forms of reference is assumed to be determined by the cognitive status of the intended referent in the discourse. Definites are supposed to be used to refer to 'given' or 'accessible' referents, whereas indefinites introduce 'new' referents into the discourse. Or in terms of for instance Christophersen's (1939) or Heim (1982), 'familiar' referents are referred to by means of definites, whereas for 'unfamiliar' referents indefinite expressions should be used. In Heim's file change semantics indefinites are assumed to introduce a new 'file card' into the semantics of the discourse, whereas definites require search for a file card that is already available.

However, this is a simplification of the nature of the definite / indefinite distinction. First, the introductory function of referential expressions is not reserved for indefinite noun phrases. Definite descriptions or proper names can also introduce referents that were not mentioned before into the discourse. Heim's solution for this phenomenon was to postulate an accommodation mechanism for first mention definites to the effect that if there is no file card available for a definite expression,

it should be added, similar to indefinite expressions. But familiarity of the intended referent within the discourse is not sufficient to explain (in-)definiteness in discourse. As we will argue, certain properties of the intended referent that are part of world knowledge have to be taken into account, too. Second, the indefinites included in the referential scales usually are only the logically referential indefinites, that is, indefinites that refer to specific referents. But indefinite noun phrases can also be used to refer to non-specific or generic referents.

These properties of the definite / indefinite distinction cannot be accounted for by the factor of accessibility of the intended referent in the current discourse model, as is claimed to be the principle underlying the referential scales. The scales do not differentiate between definite and indefinite introductory noun phrases, nor between different types of referents in the sense of specificity or genericity of the referent. For the definite / indefinite distinction, one needs to take into account not only the representation that is constructed on the basis of the linguistic information in the discourse (which is the case in the referential scale principle), but also the information that is available to the discourse participants in the immediate discourse situation and in their world knowledge. All these kinds of information may function as referential domains from which referents can be selected for reference.

A theory which relates the choice of a definite or indefinite expression to both restricted and larger knowledge domains is the Location Theory of Hawkins (1978). In this theory it is assumed that people's knowledge is arranged in discrete sets of referents. Reference can be made to sets that may be part of different knowledge domains, including the discourse domain, the immediate situation of the discourse, and a larger situation, the center of which is immediate situation. The larger situation may be for instance the city a conversation is held in, a country, or even the entire world (see also Clark & Marshall, 1981).

In the Location Theory (in-)definiteness of a referential expression is claimed to be determined by the status of the intended referent in the current knowledge representation that speaker and hearer share. If the speaker or writer assumes that the intended referent is identifiable in a set that is available to the recipient, and if the referent is a unique member of that set, he will use a definite expression. The recipient is then able to locate the referent in the set he assumes to be meant by the speaker or writer. We will call this property of definite reference *unique identifiability* of the referent, which includes both knowledge-dependent uniqueness of the referent, and the cognitive identifiability of the referent. The unique identifiability of the referent must be evaluated against the set that is relevant at that point in the discourse, not against the state of affairs that is assumed to be true in the world. There may be more referents in other or larger referential domains that belong to the set of referents for which the referential predicate is 'true', but as long as the intended referent is unique in the set of referents that is relevant in the discourse, it can be

referred to by means of a definite expression. In Hawkins (1991) the notion of 'shared knowledge' was replaced by the Sperber & Wilson's (1986) notion of 'mutual manifestness', because the set does not have to be already available but only has to be inferrable.

The following examples show that the choice of a definite referential form is based on the status of the referent in the current context, or in other words, in the representation thereof of the discourse participants.

(4) a. The police saw a man. *The man* had a gun.
b. Close *the door*, please.
c. *The man I told you about* has died.
d. *The queen of the Netherlands* always wears a hat.

In the mini-discourse in (4a), a specific referent that was not mentioned before is introduced by an indefinite expression. Once it has been mentioned in the discourse, i.e. it has become part of the linguistic context, it is uniquely identifiable to the reader as the only referent that is included in the set of referents just mentioned. Therefore, the use of a definite expression is appropriate.

In (4b) the definite expression is used to refer to a referent that is present in the (physical) situational context. The definite expression introduces a referent into the linguistic context, but the form of the expression is determined by the mutual availability of the referent in the situational context. The use of the definite expression is based on the assumption of the speaker that the door is identifiable and unique in the set of doors relevant at that moment in the discourse.

In example (4c) the choice of the definite expression is based on mutual world knowledge. Assuming that the recipient still remembers the previous conversation, the speaker may begin the discourse with the definite expression. In this example the speaker included a modifier in the expression which provides more information about the referent (i.e. an anchor), in order to help the recipient to uniquely identify the intended referent. The unique identifiability of the referent is evaluated in the set of men the speaker told the hearer about, that is in their mutual knowledge.

In (4d) the referent is assumed to be uniquely identifiable for the recipient on the basis of his world knowledge: the referent is uniquely identifiable in the set of queens of the Netherlands. It is assumed to be common world knowledge that a country has only one queen at one moment in time.

According to the Location Theory the use of the indefinite article is neutral with respect to the availability of a shared set, which means that the referent may or may not be locatable in a shared set. Alternatively, the relevant set of interpretation may be considered to be infinite (Hawkins, 1978). The key property of indefinite expressions in contrast to definite expressions is that they are used to refer to a referent that

is a member of a set in which it is not unique. Only if the referential expression can be understood not to refer to all members of the relevant set, but to only a subset, that is if the referent is not unique, an indefinite expression is used. Again, the relevant set of interpretation may be situated in different types of referential domains. Consider the following examples.

(5) a. The police saw *a man*.
b. [presenting a plate with several slices of bread] Do you want *a slice of bread*?
c. I heard that *a minister* has resigned.
d. Susan wants *a bike* for her birthday.

The indefinites in these examples all refer to referents that are not uniquely identifiable in the present context: the use of the indefinite implies that the referent referred to is a member of a set in which there is at least one more entity. In (5a) the intended referent is not uniquely identifiable because there is no set of men that is available to the recipient in which the referent can be identified. Alternatively, the relevant set of interpretation may be the set of all men in the world, one of which is the intended referent. Whether or not the intended referent is known and thus uniquely identifiable for the speaker is not encoded in the referential expression: what matters is the assumption of the speaker about the knowledge of the recipient.

It has been argued that the referent *is* unique here, and therefore non-uniqueness was argued not to be an inherent property of indefiniteness. However, if the knowledge set that is evaluated in order to determine (in-)definiteness is the assumed knowledge base of the hearer, then we can still say that the intended referent is not uniquely identifiable to the hearer.

In (5b), the speaker assumes that the set of slices of bread is situationally available to the hearer. The intended referent can be inferred to be a non-unique member of that set. If there had been only one slice of bread a definite expression would have been used. In that case the referential expression would have referred to a referent that was uniquely identifiable (a singleton set). The bread is situationally 'familiar' or given and specific to the hearer and yet one of the pieces can only be referred to with an indefinite form of reference.

In (5c) the intended referent is a non-unique member of the set of ministers that is assumed to be available in the hearer's world knowledge. The relevant set of interpretation would be the set of ministers currently in function in the country in which the sentence had been uttered.

In example (5d) the relevant set of interpretation is also located in general world knowledge. The difference with respect to (5c) is that the indefinite is under the scope of the non-factive verb *want*, which accounts for a possible ambiguity in this linguistic context. Either a non-specific bicycle is meant, which means any bicycle, or the

speaker has a particular bike in mind which has already been pointed out by Susan. No doubt in real life this would be disambiguated by additional context. This ambiguity property of indefinites is present in all contexts in which the indefinite is under the scope of a quantifier or other scope operator. What non-specific indefinites have in common with specific indefinites is that they refer to one, not-uniquely identifiable entity.

Keizer (1992) also proposed a theory in which (in-)definiteness is determined by the status of the referent in the knowledge structures in memory, rather than in the world. She argued that the difference between definite and indefinite expressions is to be found in the relation between the intended referent and the knowledge available to the discourse participants. In her view referential expressions are related to general or specific knowledge structures. In order to emphasize the relevance of the relationship between referential expressions and related knowledge structures instead of related situations, she postulates the notion of unequivocal anchoring. According to her Anchoring Unequivocality Hypothesis a definite referential expression can be used if and only if a) the head of the expression is anchored in a general knowledge structure or specific knowledge structure which can plausibly be assumed to be available to the hearer (either evoked by text or situation or invoked by the hearer) and relevant in the given discourse situation; and b) if the relation between the head and the knowledge structure can plausibly be assumed to be unequivocal to the hearer (Keizer, 1992: 274).

If any of the conditions of this hypothesis does not hold, an indefinite expression is used. In that case, too, the speaker is assumed to first look for an available and relevant knowledge structure for the expression to be anchored into. If such a knowledge structure is found, the (head of the) expression is interpreted as being equivocally related to this knowledge structure; if no such knowledge structure is found, the expression is interpreted as unanchored.

We agree with the idea that the relationship of the referential expression with the intended referent is situated in knowledge structures of situations rather than in the situations themselves. Still, we will stick to the notion of unique identifiability, because it refers more clearly to the basic property (in-)definiteness relies on, uniqueness. The notion of unique identifiability is, however, to be considered to bear upon knowledge structures as proposed by Keizer (1992).

In sum, the definite / indefinite choice is based on whether or not the intended referent is or can be inferred to be the unique member of a set. This set may be either present in or inferrable (manifest) from the preceding discourse, situational knowledge, or world knowledge. 'Familiar' referents (in the sense of Heim, 1982) are referents that are uniquely identifiable, either because they have been mentioned before, or because their uniqueness can be inferred on the basis of the context.

How can this account of (in-)definiteness be combined with the referential scale assumption for referential expressions? We claim that the accessibility principle is not sufficient to explain the use of (in-)definiteness. Instead, unique identifiability and accessibility of the referent in the existing discourse representation are two factors which are both relevant for the choice of form of a referential expression. Unique identifiability is a factor that is relevant in all types of context, whereas accessibility is only relevant in the current discourse model. Within that restricted context the two factors meet: once a not uniquely identifiable referent is mentioned it becomes uniquely identifiable as well as accessible. Together the two factors constitute the conventions of reference that have to be observed.[1]

By stipulating two usage principles, namely unique identifiability and accessibility of the referent, we can maintain the claim that the meaning of referential expressions that are not in accordance with either of the principles can be derived from the conventional function of that form. If either accessibility within the discourse or, especially in the case of first mentions, unique identifiability is deliberately violated, that is, if the referential form is not in accordance with the assumed cognitive status of the referent to the recipient, it is used in a marked way. The additional meaning of the used marked form can then be derived from the original function of that form in terms of either unique identifiability (in the case of (in-)definiteness) or accessibility of the discourse referent (for uniquely identifiable referents only). The conventional meaning of marked expression is applied to the referent that would be intended by the expected form in the current discourse context.

In this account of (in-)definiteness the function of the amount of lexical information included in a referential expression does not play a role. We think that factor is only relevant in the choice of referential form for uniquely identifiable referents, that is for definite expressions.

In the following sections it will be shown that the conventional functions of indefinite noun phrases can be exploited in order to convey additional, non-referential meaning. The meanings of several types of marked indefinites will be shown to stem from the original function of the indefinite expression, namely the function of referring to a not uniquely identifiable referent.

[1]The interaction between the two principles may go even further: for instance, demonstrative expressions may refer to uniquely identifiable referents that are members of an accessible set; attenuated (pronominal) forms can be both definite and indefinite. A discussion of these issues falls outside the scope of the present paper.

3 Marked indefinite noun phrases

3.1 Re-introductory indefinites

If an indefinite expression is used to refer to a referent that is uniquely identifiable because it has already been mentioned, it is a marked expression. A marked indefinite expression violates the convention that indefinites are used to refer to referents that are not uniquely identifiable in the knowledge structures of the recipient. Still, marked expressions can be used and interpreted meaningfully under the general Cooperation Principle that every part of a message is relevant, even when it does not seem to be the case. If the recipient encounters a linguistic form that is marked, he has to infer the intentions of the speaker or writer to use that form and, consequently, the meaning of the use of the marked form.

The most elaborate analysis of indefinites that are marked in our terms was given by Ushie (1986). She characterized this type of indefinites as expressions that are 'corepresentational'. This means that indefinites that identify referents that are already known to the recipient have an underlying representation that is identical with an already represented referent. Furthermore, Ushie claims that these expressions have a certain 'degree of newness' that results from a particular way of presenting the referent: the indefinite expression may reflect a new, subjective interpretation on behalf of the writer, or a different presentation due to a shift in the perspective from which the referent is described. Although we think that these meaning aspects of marked indefinites are correctly observed by Ushie, we think that a finer grained distinction of marked indefinites is necessary to explain the range of possible types of additional meaning signaled by the use of a marked indefinite expression.

The first type of marked indefinites to be discussed is one for which the additional meaning can be derived from the conventional function of referring to a specific referent that is not uniquely identifiable because it has not been mentioned before (the function of an indefinite to 'logically refer'). In the following examples (the second of which is a repetition of example 1), the indefinite form is used to refer to a referent that was already introduced and thus uniquely identifiable, and could therefore have been referred to by a definite expression (expressions referring to the discourse referent of interest in small capitals, marked indefinites in italics):

(6) **Tweede overvaller spare rib counter gepakt bij inbraak**

Nijmegen - EEN 35-JARIGE NIJMEGENAAR, die gisternacht op heterdaad is betrapt tijdens een inbraak in een pizzeria aan de Sint Annastraat, blijkt veel meer op zijn kerfstok te hebben.
DE MAN heeft bekend dat hij mededader was van de gewapende overval, die op 12 oktober plaatsvond bij een afhaalcentrum aan de Berg en Dalseweg.
DE MAN werd al enige dagen gezocht door de politie op verdenking van betrokkenheid bij de overval, maar tot dusver zonder resultaat.
Gisternacht kreeg de politie plotseling een melding binnen van een eigenaar van een pizzeria, die *een inbreker* in de kraag had gevat. Het bleek te gaan om de 35-jarige Nijmegenaar die op het opsporingslijstje van de politie figureerde.
(De Gelderlander, 03-11-1992)

Second robber of spare rib counter caught during burglary

Nijmegen - A 35-YEAR-OLD CITIZEN OF NIJMEGEN, caught in the act during a break-in in a pizzeria on St. Annastraat, appears to have much more on his slate.
THE MAN has confessed to being an accomplice of the armed robbery on a take out restaurant on Berg en Dalseweg, which took place on October 12.
THE MAN was being sought by the police for several days, on suspicion of participation in the robbery, but until now without success.
Yesterday night the police suddenly received a call from a pizzeria owner, who had caught *a burglar*. It turned out to be the 35-year-old citizen of Nijmegen who was on the wanted list of the police.

(7) For several years, Mrs. H.T. Miller had lived alone in a pleasant apartment. [..] She was a widow. [..] She had no friends to speak of. [..]
Then she met MIRIAM. It was snowing that night. Mrs. Miller had finished drying the supper dishes and was thumbing through an afternoon paper when she saw an advertisement of a picture playing at a neighborhood theater. The title sounded good, so she struggled into her beaver coat [..] and left the apartment. [..]
A long line stretched in front of the box office; she took her place at the end. [..] The line seemed to be taking its own time and, looking around for some distraction, she suddenly became conscious of *a little girl standing under the edge of the marquee*.
Her hair was the longest and strangest Mrs. Miller had ever seen. [..]
(Truman Capote, 'Miriam', in Contemporary American Short Stories; cited in Ushie, 1986)

In (6), the reader may expect the already uniquely identifiable robber to be referred to at the moment the indefinite expression occurs, on the basis of the current context. For instance, the title implies that a particular criminal has been caught. Moreover, this successful arrest was probably the main reason to publish the information in the newspaper in the first place. However, the form of the referential expression does not match the fact that the expected referent is already uniquely identifiable as well as highly accessible for the reader since the referent is the only member of the set of caught criminals already mentioned. Because of the clash of the expected expression, which is a definite expression, and the observed expression, the indefinite, it is observed that the expression must be marked. The inference that follows from the use

of the indefinite is that the speaker intended to convey that the intended referent was *not* uniquely identifiable in the described situation, which is the original function of an indefinite expression.

The application of this conventional function to the intended referent leads to the inference that the intended referent is re-introduced, as if it was not uniquely identifiable. In (6) the indefinite expression signals that the robber was *not* uniquely identifiable in the situation that is being described in the text. The unique identifiability of the referent is not evaluated against the knowledge structures that the writer assumes to be available to the reader, but against the knowledge structures of a character in the text. Thus, the criminal is introduced into the consciousness of the police or the pizzeria owner, signalling that either of them encountered the criminal for the first time.

Had the expression been *the robber*, then the writer would have been the subject of consciousness whose point of view would have led to the definite referential expression. At that moment in the text, the writer is in a position to use an definite expression, because he knows that the reader can already uniquely identify the discourse referent. However, the writer chooses to use the expression 'a burglar' which can only be used for the intended referent *within the described situation*, because in that situation the intended referent is not uniquely identifiable. In the present example, the referent is not even identifiable as a robber but only as a burglar.

Similarly, the indefinite in (7) signals that the intended referent is not uniquely identifiable for the character in the described situation. The referent is re-introduced into the consciousness of Mrs. Miller, despite the fact that the reader would already be able to uniquely identify the referent.

Thus the meaning of a marked indefinite noun phrase is derived from the regular function of the indefinite, which is to refer to a not uniquely identifiable referent. The unique identifiability is not evaluated against the assumed knowledge of the recipient of the entire discourse, but against the knowledge structures available in the episode of the text that is being described. Within the referential domain of the text that is shared by writer and reader, a referential subdomain is created, in which different 'knowledge structures' are assumed to be valid. A definite noun anaphor would not have the additional function of signalling a different referential domain because it is identificationally appropriate in the referential domains that are shared by writer and reader. Consequently, the definite expression would be interpreted as belonging in the current referential domain, which is that of the writer.

The referential inference for these marked indefinites is nevertheless only tentative: further context is needed in which the inferences is either confirmed or cancelled. In (6) an explicit confirmation follows the indefinite immediately. However, it could just as well have been a cancellation, which would be for instance *it turned out not to be the man that was on the wanted list*. Still, such a cancellation provides

evidence for the fact that the inference is supposed to have been made, otherwise there would have been no information to cancel. The following example, also taken from a Dutch newspaper, is an illustration of an explicit cancellation:

(8) **Krantenbezorgster neergestoken zonder aanleiding**

Nijmegen - Een zeventienjarige krantenbezorgster is gistermorgen om kwart over zeven zonder enige aanleiding door EEN ONBEKENDE MAN neergestoken. Dat gebeurde op de Lieven de Keystraat in Heseveld. De politie tast nog in het duister naar het motief van de steekpartij.

Onmiddellijk na de steekpartij stelde de politie een intern bijstandsteam van negen mensen samen, dat het delict nu onderzoekt. Dat team heeft direct een buurtonderzoek gehouden in de straat van het misdrijf en de straten daar omheen. Bij alle huizen is aangebeld met de vraag of de bewoners iets hadden gezien. Dat leverde geen concrete aanwijzingen op.

Vlak na de misdaad kreeg de politie wel een melding binnen van buspassagiers, die vertelden dat er *een man met een mes* in de bus zat. Maar het signalement van deze man, een 29-jarige Nijmegenaar, komt volgens een woordvoerder van de politie geenszins overeen met het signalement van de dader van de steekpartij.
(De Gelderlander, 21-11-1992)

Newspaper-girl stabbed without reason

Nijmegen - Yesterday morning at a quarter past seven, a seventeen-year-old newspaper-girl was stabbed by AN UNKNOWN MAN without reason. This happened at the Lieven de Keystraat in Heseveld. The police are still ignorant about the motive of the knifing-incident.

Immediately after the knifing-incident the police formed a special investigation team of nine officers, which is now investigating the crime. The team has conducted a neighbourhood inquiry in the street in which the crime was committed, and its surrounding streets. All inhabitants have been questioned on eye-witness reports. So far this has not led to any concrete clues.

A short time after the crime the police were informed by some bus-passengers who said that they had seen *a man with a knife* in the bus. However, the description of this man, a 29-year-old citizen of Nijmegen, does not match the description of the perpetrator of the crime, according to a spokesman of the police.

The fact that the inference of coreference can be cancelled indicates that the inference is a conversational implicature. This is an interesting observation. However, since the explanation of the meaning of all types of marked indefinite expressions in terms of implicatures is quite complicated, we will not address this issue in the present paper.

That indefinites may introduce a referent into a referential subdomain has been observed already by for instance Ushie (1986), Wiebe (1991), and Sanders (1990, 1994). They describe the nature of this kind of subdomain as being bound by a personal perspective, which means that the subdomain is attributed to a 'subject of consciousness' or a 'focalizer'. In narratives, the focalizer can be for instance the narrator or a character in the text. However, in the following examples the nature of the referential subdomain does not necessarily reflect a personal perspective:

(9) **Serie bankovervallen: drie jaar en tbs geëist**

Door onze correspondent

Arnhem - De officier van justitie mr. R. Eigeman, heeft voor de rechtbank in Arnhem drie jaar onvoorwaardelijke gevangenisstraf geëist tegen EEN 31-JARIGE MAN UIT BEUNINGEN. DE MAN wordt verdacht van een reeks overvallen op banken en een postagentschap in Nijmegen.

Op 18 mei van dit jaar eiste *een overvaller* van een medewerkster van een PTT-postagentschap in Nijmegen geld. Hij bedreigde haar met een vuurwapen. Dit wapen ging af terwijl de man zich met de buit, bijna 7700 gulden, uit de voeten wilde maken. Volgens de Beuningenaar was dat geen opzet. 'Ik heb niet bewust geschoten.'

Drie maanden later, op 5 augustus, was een filiaal van de Rabobank in Nijmegen aan de beurt. Gewapend met een Riot-gun stapte *een overvaller* op een baliemedewerker af en eiste geld. Dit keer bedroeg de buit ruim 7000 gulden. Bij overvallen op andere bankfilialen zou door de verdachte bij elkaar nog eens zo'n 25.000 gulden zijn buit gemaakt.

De officier van justitie hield de rechtbank voor dat het niet de eerste keer is dat de man voor dit soort misdrijven terechtstaat. [...]

(De Gelderlander, 06-11-1992)

Series of robberies: three years of imprisonment for the accused

From our correspondent

Arnhem - Public prosecutor R. Eigeman demanded a court sentence of three years of unconditional imprisonment for A 31-YEAR-OLD MAN FROM BEUNINGEN. THE MAN is suspected of a series of hold-ups at several banks and a post office in Nijmegen.

On May 18th of this year, *a robber* demanded money from an employee of a post-office in Nijmegen. He threatened her with a gun. The gun went off while the man was trying to escape with the loot, which was almost 7700 Dutch guilders. According to the man from Beuningen, this was an accident. 'I didn't fire on purpose.'

Three months later, on August 5th, a branch-office of the Rabobank in Nijmegen was the target of robbery. Armed with a Riot-gun *a robber* approached a desk clerk and demanded money. This time the loot was over 7000 guilders. The suspect is said to have seized another 25.000 guilders by robberies on other branch-offices.

The public prosecutor argued to the court of justice that it was not the first time the man was on trial for this sort of criminal acts.[...]

(10) **Girl subdues attacker**

A brave young woman turned the tables on A ROBBER and beat him with an iron pipe which she had wrested from him, then handed him over to the police in Osaka Wednesday night.

At about 11:25 p.m. Wednesday, *a man* attacked Miss Mayumi Sanda, 23, of Oyodo-cho, Oyodo-ku, Osaka, on a street in the same ward.

(Mainichi Daily News, March 4, 1974; cited in Hinds, 1977)

In (9) the coreferring indefinite expressions signal domains that are bounded by temporal cues (*on May 18th, three months later*), but the point of view remains that of the narrator. In example (10) the referential domain is text-structurally induced. The first sentence of this newspaper article is a summary of the whole story, which is typical in news stories and usually called a 'lead'. After the lead, the story starts

again, elaborating upon the lead. In this new text-structurally induced domain the main characters are re-introduced by means of indefinite expressions.

It can therefore be assumed that the subdomains in which referential expressions have their own 'truth conditions' can be bounded by different kinds of properties, including personal as well as temporal, text-structural, and perhaps even spatial ones (see also Palacas, 1993).

3.2 Property expressing indefinites

3.2.1 Marked predicative indefinites

Another type of marked indefinite that is used to refer to a referent that is already uniquely identifiable is a type that predicates[2] particular properties of an already mentioned referent. Consider the following examples (12 is a repetition of 2):

(11) [Miss Moss had been asked by the landlady to go out of her room if she couldn't pay her rent by eight o'clock tonight. Left alone in her room, Miss Moss saw herself in the glass and talked to the person in the glass.]
'You silly thing,' scolded MISS MOSS. 'Now what's the good of crying: you'll only make your nose red. No, you get dressed and go out and try your luck - that's what you've got to do.' She unhooked her vanity bag from the bedpost, rooted in it, turned it inside out. 'I'll have a nice cup of tea at an ABC to settle me before I go anywhere,' she decided. 'I've got one and thrippence - yes, just one and three.'
Ten minutes later, *a stout lady in blue serge, with a bunch of artificial 'parmas' at her bosom, a black hat covered with purple pansies, white gloves, boots with white uppers, and a vanity bag containing one and three,* sang in low contralto voice:
'Sweet-heart, remember when days are forlorn
It al-ways is dar-kest before the dawn.'
But then the person in the glass made a face at her, and Miss Moss went out.
(K. Mansfield, 'Pictures'; cited in Ushie, 1986)

(12) [De hoofdpersoon, een vrouw, reist per trein door Tsjechoslowakije. Ze deelt een coupé met een aantal mensen, onder wie enkele zigeuners met een baby. Een spoorwegbeambte komt binnen en beveelt hen de coupé te verlaten.]

[2]In Deliverable R1.4.1 this function was referred to as *attributive*. However, since Donnellan (1966) this term has been used for noun phrases that have the interpretation of 'whoever fits the description'. As this interpretation is not what is meant here, we will use the term *predicative* instead.

Daarop zette hij zijn borst uit en bedolf ons onder het gewicht van zijn dienstmededeling. Dit was een moeder-met-kindcoupé. 'Raus!' vatte hij de situatie samen. 'Alle: Raus!' En terwijl de Slowaken, de zigeunerinnen, de baby en ik nog bezig waren het vertrek te ontruimen, kwam DE MOEDER er al aan. *Een mooie jonge vrouw*[3] haastte zich met nietsziende ogen, haar kind tegen zich aangedrukt, langs ons heen om zich ondanks de beproevingen van de reis aan haar moederschap te wijden.
(M. de Moor, 'Eerst Grijs Dan Wit Dan Blauw', Amsterdam: Uitgeverij Contact, p. 237)

[The main character, a woman, is travelling by train in Czechoslovakia. She shares a train compartment with some people, including gipsies with a baby. A railway officer comes in and orders them to leave the compartment.]
After that he thrust out his chest and buried us under the weight of his official announcement. This was a mother-and-child compartment. 'Raus!' he summarized the situation. 'Alle: Raus!' And while the Slovaks, the gipsies, the baby and I were still clearing the compartment, THE MOTHER was already arriving. *A beautiful young woman*[3] hurried past us without looking, her child pressed against herself, to devote herself to her motherhood despite the harassments of the journey.

(13) **Die vuige pers neemt Simonis ook nog zijn feestje af**

[..] Voor Simonis is DE PERSCONFERENTIE het moment van de afrekening. Precies een week nadat bekend werd dat bisschop Bär sneuvelde - of: *moest* sneuvelen - wil hij zijn gram halen op DE NEDERLANDSE JOURNALISTIEK, en die van 'de Volkskrant' in het bijzonder. Want wat die vrijdag durfde beweren over zijn persoonlijke betrokkenheid bij de kwestie-Bär... onzin, onzin, onzin!
Een week lang al wordt hij naar eigen zeggen achtervolgd met 'leugens' en 'onwaarheden'. Hij, en ja, de hele kerk eigenlijk, zijn het slachtoffer van 'regelrechte laster en smaad'. En 'omwille van de waarheid' en zijn 'goede naam', rest hem niets dan de strijd aan te gaan met een journalistiek 'die zich beroept op anonieme bronnen', een berichtgeving die 'onbetrouwbaar is, en unfair.'
Ondanks deze niet mis te verstane kwalificaties, treft Simonis *een cynisch en ongelovig persvolk* tegenover zich.
(De Volkskrant, 22-03-93)

Foul press deprives Simonis of his party

[..] To Simonis THE PRESS CONFERENCE is the moment of reckoning. Exactly one week after it became public knowledge that bishop Bär had fallen, - or: *had to* fall - he wants to get even with DUTCH JOURNALISM, especially with 'de Volkskrant'. The nerve this particular paper had to claim he was personally involved with the Bär-question ... nonsense, nonsense, nonsense!
He claims to have been persecuted with 'lies' and 'untruths' for a whole week. He, and in fact the whole church, are the victims of 'slander and insult'. And with 'truth' and his 'good reputation' in mind, he cannot but start a fight against a journalism 'that calls upon anonymous sources', a news coverage that is 'unreliable, and unfair'.
Notwithstanding these harsh qualifications, Simonis faces *a cynical and incredulous press*.

[3]Notice that the indefinite takes subject position here. It has been argued by for instance Reuland (1988) that the indefinite in subject position in Dutch normally gets a generic reading, whereas in English the indefinite may get either a generic or an existential reading. In contrast, here the indefinite on subject position is existential (or gets a specific reading in Dutch). Apparently, if the context provides evidence for the existentiality or specificity of the referent, indefinites on subject position can get a non-generic interpretation. We are currently investigating this issue more thoroughly.

These indefinite expressions cannot be explained as introductions of a not uniquely identifiable referent in a distinct referential subdomain. They differ from the re-introductory indefinites because the coreferential inference they give rise to does not include the additional meaning that this may or may not be the referent that is expected on the grounds of the identifiability in the current context. Evidence for this observation is the fact that the coreference between these expressions cannot be cancelled. For instance, in (12) *A beautiful young woman hurried past us, but she was not the mother that was supposed to be coming* does not make sense. Still, there is a clash between the expected form of reference, which is a definite expression, and the actually realized one. So how should they be interpreted?

If these expressions are conceived of as marked expressions, it should in principle be possible to explain their meaning along the lines described for the marked expressions above. For marked expressions an important condition is that the expected referential form differs from the actually used form. For the examples given above, this is indeed the case: the intended referents are all uniquely identifiable and can therefore be referred to by means of a definite expression. The definite expression can be either a proper name, a full definite noun phrase, or a pronoun, depending on the rest of the context.

Notice that this is not a question of simply replacing the indefinite article for a definite article. In most cases a replacement is impossible because the use of a definite article implies that the content of the referential expression is uniquely identifiable, *including* the content of the modifiers of the expression. Since the modifiers contain new, not identifiable information here, this is incompatible with the use of a definite article.

In example (11) for instance, the modifiers consist of non-inferrable information, and the definite variant of the indefinite expression is inappropriate. The information that the woman has become *stout* and wears the clothes being described is new information in this context. Therefore, it cannot be 'inserted' by means of a definite noun anaphor but has to be stated either explicitly in normal clausal predicates (e.g., *Ten minutes later, she was wearing [...] and gave a stout impression*) or, as it appears, by means of a marked indefinite expression. Still, sometimes it ís possible to replace the indefinite article with a definite one. In those cases, the content of the modifiers can be inferred to be uniquely identifiable properties of the referent. But this is a post hoc inference, the interpretation of which would run like: 'that must be generally known information, I probably have missed something'.

If the expression is acknowledged as marked by the reader, a meaningful interpretation still has to be inferred. According to our theory, the resulting inference should be derived from the original function of the indefinite. However, the function of referring to a referent that is not uniquely identifiable does not give the reader a

meaningful clue. Instead, he has to interpret the expression as both referring to the expected referent and at the same time predicating new information of that referent.

This predicative function is also a standard function of the indefinite. The most regular way of using an indefinite expression to attribute properties to an already existing referent is using it as nominal predicate, as in for instance *Bill is a nice boy*. The indefinite expression in this sentence does not introduce a new discourse referent and is not referential in that sense. Its function is to express particular properties and to predicate these properties of an already existing discourse referent (Keizer, 1992). In the present example, the subject is classified as a nice boy. Another example is the following:

(14) Robert is - sinds enige tijd - *een man die met duistere blauwe ogen zit te roken en te zwijgen*, Erik kent hem al tientallen jaren.
(De Moor, p.15)

For some time now, Robert has been *a man who sits and smokes with dark blue eyes in utter silence*; Erik has known him for decades.

Predicative indefinites are not only used in normal predicate constructions, but also in elliptic constructions. Thus the use of a copula does not seem to be explicitly expressed in order to indicate that the indefinite is to be interpreted as predicational rather than referential. The indefinite expressions in (15) and (16) also seem to draw upon the predicative function of referential expressions.

(15) Maar (Jo) Gijsen wordt met hoon en vermaak uitgeluid. *Een enge, zwart-rigide, gevoelloze man, tevens een Lulletje Wijwater met een inferioriteitscomplex, een man die vochtig spreekt, die spottend ook wel Joke genoemd werd, dommig, en zelfs niet in staat orde te houden als hij aan héél oude wijfjes lesgaf.*
(Rinus Ferdinandusse, Vrij Nederland, 30-1-1993:7)

(translated where possible)
But (Jo) Gijsen [a Dutch bishop] gets a scornful farewell. *A frightening, black-rigid, insensitive man, also a Holy Water Wimp (?? half-baked twit) with an inferiority complex, a man who talks moistly, who has mockingly been called Joey, foolish, not even capable of keeping order when teaching little ancient women.*

(16) Erik is volkomen van de kaart sinds uitgerekend hij, maandag, dat verschrikkelijke paar moest vinden: zijn jeugdvriend Robert als krankzinnige moordenaar en Magda, *een vrouw die hem volgens mij nooit bijster veel heeft gezegd*, in de meest absurde staat waarin een mens maar kan verkeren, dood.
(De Moor, p. 272)

Erik has been totally out of it since he of all people, on Monday, had to find that horrible couple: his old friend Robert an insane murderer and Magda, *a woman who in my opinion never meant very much to him*, in the most absurd state a human being can be in, dead.

Despite the fact that predicative expressions do not refer to discourse referents, the function of (in-)definiteness of predicative expressions is similar to that of referential expressions: indefinites identify properties that are not uniquely identifiable as belonging to some discourse referent for the recipient, whereas definites can only be used when the properties are uniquely related to a discourse referent (Keizer, 1992: 'unequivocally anchored'). So although these expressions have a different discourse function from referring expressions, they have important similarities.

The marked indefinites in examples (11)-(13) seem to be a curious mixture of the referential function and the predicative function for which indefinite expressions can be used. Therefore the interpretation of the marked indefinites may have been derived from this predicative use of indefinite expressions in which particular properties are predicated of a discourse referent. The expressions refer to already uniquely identifiable referents and at the same time attribute information to those referents. This means that the function of these marked expressions can still be derived from the original function of the indefinite form, which is to predicate not uniquely identifiable properties.

Still, marked 'predicative' indefinites resemble marked re-introductory indefinites because they reflect point of view. Ushie (1986) even characterized the indefinite in (11) as reflecting discontinuity in point of view. She argued that '[an] already identified individual is represented as if [it was] newly introduced and [that] this is due to the discontinuity in point of view from which [it is] represented.' She also based this argument on the following examples, which she characterized as reflecting a discontinuity and shift in point of view respectively.

(17) [Carl Bowler was a carpenter who loved to hunt and fish. [...] One day, while out in the woods, Carl was nabbed by a local constable. The constable took him to the mayor, who also acted as the chief of police, tax collector, and justice of the peace. The constable claimed Carl had been trespassing, and the mayor agreed.]
CARL protested, 'Wait a minute! I was on public land the whole time. If this is a trial, I want a lawyer. And I want a jury, too.'

The mayor answered: 'This *is* a trial. And if you don't quit making such a disturbance, I'll find you in contempt of court. Thirty days in the county jail!'
A shocked and furious sportsman was hauled away. (M. Lipman, 'Point of Law'; cited in Ushie, 1986)

(18) [Matthew Cuthbert and his sister Marilla decided to adopt a boy from an orphan asylum because they were old and wanted someone to help them on the farm. But for some mistake, instead of a boy, a girl was sent to them. Matthew couldn't tell her that she must go back to the asylum, seeing how glad she was to come to live with them. Besides he was charmed by Anne's personality. But Marilla was determined to send her back and told her that it was a mistake. Anne was grieved to hear it. Sometime after, ANNE went upstairs to bed, [..] later, Marilla and Matthew began discussing the matter.]
'I'm not suffering for company,' said Marilla shortly. 'And I'm not going to keep her.'
'Well now, it's just as you say, of course, Marilla,' said Matthew rising and putting his pipe away. 'I'm going to bed.' To bed went Matthew. And to bed, when she had put the dishes away, went Marilla, frowning most resolutely. And upstairs, in the east gable, *a lonely, heart-hungry, friendless child* cried herself to sleep.
(L.M. Montgomery, 'Anne of Green Gables'; cited in Ushie, 1986)

However, it can hardly be maintained that the point of view in these examples changes: the viewpoint from which the events are represented is the same before and after the use of the indefinite expression. Rather, the character in the story has undergone some change and this is indicated by means of the predicative indefinite expression. The already uniquely identifiable referent is not re-introduced as if it were introduced into a different referential subdomain; instead, the indefinite expression is used to predicate information of the referent.

Further evidence for this can be found by considering the cancellability of the pragmatic implication that is evoked by the re-introductory indefinite. Whereas cancelling of the identity of the referent is possible for the re-introductory indefinites of section 3.1, it is impossible for the predicative indefinites described here. In (18) for instance, a continuation like *a lonely, heart-hungry, friendless child cried herself to sleep, but this child was not Anne* is incoherent. In the case of a re-introductory indefinite the identity of the referent is deliberately left unspecified, whereas this is not at issue in the case of a marked predicative indefinite. The main function of the latter is to attribute information to an already established referent.

One final observation is the following. In the examples above, the predicative information was mainly expressed by modifiers of the head NP. But the head NP itself can also be used to convey property information of the referent. In the following example (which Ushie (1986) also classified as demonstrating shift in point of view), the marked indefinite consists of an adjective expressing old information, and a head NP expressing new, classificational information:

(19) [..] A short time before, the mole had dug a long passage under the earth [..] and here she (the field mouse) had permission to walk with Tiny whenever she liked. But he warned them not to be alarmed at the sight of A DEAD BIRD which lay in the passage [..]

The mole took a piece of phosphorescent wood in his mouth, and it glittered like fire in the dark passage. When they came to the spot where lay THE DEAD BIRD, the mole pushed his broad nose through the ceiling, the earth gave way so that there was a large hole, and the daylight shone into the passage. In the middle of the floor lay *a dead swallow*, his wings folded close to his sides, his feet and his head drawn up under his feathers.

(H.C. Andersen, 'Little Tiny'. In 'Andersen's Fairy Tales', translated by E.V. Lucas and H.B. Paull, New York: Grossett and Dunlap, pp. 26-27; cited in Ushie, 1986)

The head NP *swallow* is a subordinate of *bird* and thereby attributes more specific, classifying information to the intended referent. If this indefinite expression would not contain new lexical information, in other words, if reference would be made by means of *a dead bird*, it would be inappropriate in this context. Note that reference with *a dead animal* is possible in (19). This expression would be interpreted as conveying the additional information that the specific properties of the bird could not be discerned, but also as an indefinite expression that reflects a referential subdomain.

To conclude, marked indefinite expressions that violate the unique identifiability principle for referential expressions may be used and interpreted as expressions predicating properties of an already mentioned, uniquely identifiable referent. This function is inferred from the original function of indefinites of predicating not uniquely identifiable properties of a referent. Optionally, the predicative function may be attributed to the writer or a character and in that way reflect point of view.

3.2.2 Marked classifying indefinites

Consider the following examples (fragment 20 has been used earlier as context for a different marked indefinite expression):

(20) **Die vuige pers neemt Simonis ook nog zijn feestje af**

[..] Voor Simonis is DE PERSCONFERENTIE het moment van de afrekening. Precies een week nadat bekend werd dat bisschop Bär sneuvelde - of: moest sneuvelen - wil hij zijn gram halen op DE NEDERLANDSE JOURNALISTIEK, en die van 'de Volkskrant' in het bijzonder. Want wat die vrijdag durfde beweren over zijn persoonlijke betrokkenheid bij de kwestie-Bär... onzin, onzin, onzin!

Een week lang al wordt hij naar eigen zeggen achtervolgd met 'leugens' en 'onwaarheden'. Hij, en ja, de hele kerk eigenlijk, zijn het slachtoffer van 'regelrechte laster en smaad'. En 'omwille van de waarheid' en zijn 'goede naam', rest hem niets dan de strijd aan te gaan met *een journalistiek 'die zich beroept op anonieme bronnen', een berichtgeving die 'onbetrouwbaar is, en unfair.'*

(De Volkskrant, 22-03-93)

Foul press deprives Simonis of his party

[..] To Simonis THE PRESS CONFERENCE is the moment of reckoning. Exactly one week after it became public knowledge that bishop Bär had fallen, - or: had to fall - he wants to get even with DUTCH JOURNALISM, especially with 'de Volkskrant'. The nerve this particular paper had to claim he was personally involved with the Bär-question ... nonsense, nonsense, nonsense!

He claims to have been persecuted with 'lies' and 'untruths' for a whole week. He, and in fact the whole church, are the victims of 'slander and insult'. And with 'truth' and his 'good reputation' in mind, he cannot but start a fight against *a journalism 'that calls upon anonymous sources', a news coverage that is 'unreliable, and unfair'*.

(21) In 1974 THE AMERICAN MAGAZINE ROLLING STONE invited JAN MORRIS to write a series of travel articles. The fruits of that collaboration between *a romantic traditionalist Welsh author* and *a lovely and innovative American paper* appear in Destinations. (Oxford Books, S 1980; cited in Ushie, 1986)

(22) In addition to the spiritual suffering of loneliness, of having to leave behind him 'the world which had made him what he was', HAMMARSKJÖLD had to endure [..] the plain physical suffering of constant nervous strain and overwork. If, as the reader goes through the entries between 1953 and 1957, he finds himself impatient [..] with their relentless earnestness and not infrequent repetitiousness, let him remember that most of them must have been written by *a man at the extreme limits of mental and physical exhaustion*.

(W.H. Auden, Foreword to Dag Hammarskjöld, 'Markings'; cited in Ushie, 1986)

In these examples the indefinite expression is again marked because the intended referent is uniquely identifiable at the moment of occurrence of the indefinite. Furthermore, they express properties of that referent. In this respect, they are like the marked predicative indefinites above. However, these indefinites have a number of characteristics that distinguish them from the marked predicative indefinites.

First, they present the intended referent as a member of a subclass of a basic category, with certain properties. They can be paraphrased by an expression of the form 'a case of ...', 'someone who ...'. In (22) for instance, the paraphrase *this is a case of a man at the extreme limits of mental and physical exhaustion* indicates that the referent can be seen as the member of a subset of men with particular characteristics.

Second, if the indefinite expression is replaced by a definite expression without modifiers (be it a proper name, a definite noun phrase, or a pronoun), the informative value of the sentence changes to the effect that the most important part of the message is no longer contained the referential expression. For instance, in (20) the sentence *And with 'truth' and his 'good reputation' in mind, he cannot but start a fight against Dutch journalism* would be fine[4]. The informative value of this sentence would be the fact that Simonis is forced to fight. However, in the original sentence with the indefinite characterizations of Dutch journalism the most important part of the

[4]In Dutch, the reference to Dutch journalism would have the form of the definite noun phrase *de Nederlandse journalistiek*.

message is not the fighting, but the negative properties of Dutch journalism as Simonis sees them. This also corresponds to a change in the intonation pattern of the sentence: the main accent of the sentence is respectively on *fight* or on the indefinite noun phrases. In (22) a replacement the sentence would even make no sense whatsoever: the clause *let him remember that most of them must have been written by Hammarskjöld* does not convey relevant meaning in the context.

This change in informative value can be explained by the fact that the rest of the sentence does not convey new information. The only relevant new information is included in the marked indefinite expression. Thus the indefinite expressions above are part of the comment in the topic-comment structure of the sentence and convey important information. This meaning property of the marked indefinites was not present in the marked predicative expressions discussed in section 3.2.1.

Third, when the indefinites would be replaced with indefinites without the modifiers, the examples above would become pragmatically ill-formed, whereas the indefinites in the preceding sections would refer to an entirely different, new discourse referent. This is probably also due to the fact that the information included in the modifiers of the indefinites in this section is part of the comment of the sentence, whereas the information included in the indefinites of the previous section is part of the sentence topic.[5]

So both the marked indefinites in 3.2.1 and the marked indefinites here refer and predicate, but the predicative value of the indefinite noun phrase is a function of its role in the topic-comment structure of the sentence. In the present examples, the marked indefinites are used to present uniquely identifiable referents as a member of a subclass of entities with particular properties. Therefore, we will call them marked classifying indefinites.

In some respects, this analysis differs from the analysis of Ushie (1986). She claimed that the indefinites in (21) and (22) reflect a subjective interpretation of the referent on behalf of the writer. This is not incompatible with the analysis proposed here that the indefinites are used to predicate information of a referent, because this predication can be conceived of as stemming from the writer (especially since it is part of the comment).

If, however, the marked predicative indefinites as described in 3.2.1 and the marked classifying indefinites here are considered to belong to one category of marked predicative indefinite expressions, the property of reflecting a subjective opinion of the writer cannot be maintained to hold for the category as a whole. The examples in 3.2.1 can hardly be argued to reflect subjective opinions of an overtly present writer. Examples (11), (17) and (18) are fragments with an omniscient

[5]There is a way in which 'a man' may be interpreted in a relevant way. The meaning would be something like: what he has written is typical for a man, as opposed to a woman. This use of indefinites will be discussed shortly.

narrator. In example (12), the predicative indefinite may be interpreted to stem from a first person narrator (not to be mistaken for the writer).

We propose that both marked predicative indefinites and marked classifying indefinites may reflect the subjective point of view of a subject of consciousness. This subject of consciousness may be the writer, the narrator, or a story character. In the case of an omniscient narrator, it is unclear whose view is represented (who observes the properties being described of the referent), which results in an objective, overall point of view.

Finally, consider another type of indefinites. In the following examples, the indefinites do not contain new information:

(23) I taught Helen to spell with her fingers. Eventually, she became able to communicate with her family, who also learned finger spelling. Now she tries to teach everyone she meets to spell with her fingers.
This morning, when BELLE, her dog, whom she is very fond of, came up to her, Helen began to manipulate the dog's claws. We were surprised when we recognized what she was doing. She was trying to teach *a dog* to spell!
(Part of Anne Mansfield Sullivan's letter dated March 20, 1887, in Helen Keller, 'The Story of My Life', New York: Dell, p.269; Slightly revised by Ushie, 1986)

(24) 'Sing it again, Homer', Ulysses said.
'O.K.', Homer said, and began to sing again, but this time the younger brother sang with the older, and as they (Ulysses and his brother) sang Ulysses saw the freight train again with THE NEGRO leaning over the side of the gondola, smiling and waving. That was one of the greatest things that had ever happened to Ulysses Macauley in his four years of life in the world. He waved to *a man* and the man waved back to him - not once, but many times. He would remember that as long as he lived.
(W. Saroyan, 'The Human Comedy', New York: Dell, pp. 82-83; cited in Ushie, 1986)

(25) One morning when the wind was from the west, STUART (a two-inch mouse-child, the second son of Mr. and Mrs. Frederick C. Little) PUT ON HIS SAILOR SUIT AND HIS SAILOR HAT [..] and set out for a walk [..] Stuart [..] hurried across to the sailboat pond in Central Park. [Stuart notices a fine boat and addresses the owner.]
'Excuse me, sir', said Stuart to the man who was turning her, 'but are you the owner of the schooner Wasp?'
'I am', replied the man, surprised to be addressed by *a mouse in a sailor suit*.
(E.B. White, 'Stuart Little', Tokyo: Kenkyusha, p.25; cited in Ushie, 1986)

In these examples the indefinites are strongly related to already uniquely identifiable referents, but we do not consider these expressions marked in the sense that refer to those referents despite the fact that they are indefinite. The reason for the use of indefinites here is not to re-introduce a referent into a new referential domain, because a cancellation of the inference that the referent in question is the antecedent

is not appropriate. Furthermore, the indefinite expressions do not contain information that is predicated of an already established referent: if there are modifiers, they are already known to be properties of the just mentioned referent.

A remarkable characteristic of these indefinites is that they can all be paraphrased by adding the phrase: *can you imagine!* This implicit meaning aspect indicates that the class properties of the formerly mentioned referents are essential for the meaning, not the referents themselves. It is weird to be addressed by any mouse, it is weird to teach any nonparticular dog to spell.

If the indefinites are replaced with their definite counterparts, the informative value of the sentences will either change or be lost. Therefore, the referential expressions are not intended to refer to the formerly mentioned referent, which also indicates that they are not marked.

Therefore, these indefinites may be considered as the non-specific variants of earlier mentioned referents, that is, any member of the set of referents that the noun phrase specifies. This means that a different referent is being referred to, which is an arbitrary, non-unique member of a set. As this referent may be any member of the set that is represented by the referring expression, the just mentioned referent may also be that nonparticular member. This inferrable relationship is responsible for the fact that there still is an indirect coreferential relation between the non-uniquely identifiable referent denoted by the indefinite and the uniquely identifiable, already activated discourse referent.

The non-specific reference is used by the writer to stress a classificational property of an already existing referent by means of reference to a non-unique member of a set of referents. This enables him to generalize over the particular situation just described. For the reader, the interpretation of these indefinites results in the representation of a non-specific interpretation referent, which is then related to an already existing discourse referent.

4 Conclusion

The use of marked indefinite expressions is an instance of a creative manipulation of the pragmatic conventions for the use of referential expressions. In the literature, this notion of referential markedness has so far only been described for definite expressions that contained more information than appropriate considering the accessibility of the referent within the discourse.

For the use of indefinite referential expressions, however, the accessibility principle is not sufficient as an underlying principle. The distribution of definite and indefinite expressions is not based on the accessibility of the intended referent in the assumed discourse model of the recipient, but on the unique identifiability of the

referent in the knowledge structures that are either included in or tightly related to the discourse model. As with accessibility, this principle reflects the orientation of the writer or speaker to choose a referential form on the basis of the assumed status of the intended referent in the present knowledge structures of the recipient.

Furthermore, this account of reference makes it impossible to maintain the claim that the amount of information contained in any referential expression is conversely related to the accessibility of the intended referent. For (in-)definiteness, it is not the amount of information included in the referential expression that matters, but only the type of referential expression (that is, whether it is definite or indefinite).

If we assume both the accessibility principle and the unique identifiability principle to be basic conventions of reference, marked referential expressions, including indefinites, can be explained as exploitations of these conventions. The use and interpretation of any marked referential expression can be derived from the function of that form according to the conventions. This function is then applied to the referent that is inferred to be intended in the current context.

For indefinites, we have described several ways in which they can be used in a marked way to convey additional meaning. First, they can be used to introduce an already uniquely identifiable discourse referent in a referential subdomain, which may reflect a particular point of view from which the story is presented. Second, they can be used to predicate properties that are not uniquely identifiable of an already existing discourse referent or to present the referent as member of a subclass with particular properties. The information that is predicated in this way, may also reflect point of view in the sense that the predicated information may be subjective. For all types of marked indefinites, the reader has to infer that the indefinite expression does not introduce a new discourse referent, but is related to an already uniquely identifiable referent. This account implies that cognitive and pragmatic factors have to be included in theories about reference and discourse representation.

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