

(De)accenting Definite Descriptions¹

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In this paper it is shown that a definite description refers to a given discourse referent if the descriptive content is deaccented. But if there is an accent on the descriptive content, a novel referent is introduced. Starting from a uniqueness view of definiteness, a distinction between two uses of definite descriptions is proposed: 'Given definites' represent identity anaphors exploiting the order of salience of discourse referents. 'Non-given definites', on the other hand, make use of their descriptive content (possibly supported by bridging referents) to determine a unique referent. The definite article uniformly indicates that the referent is unique, either via salience or via description.

1 Introduction

It has been argued by various authors that there is no general correspondence between focus and new information, and background and old information, respectively (cf., e.g., Rochemont 1986, Schwarzschild 1999). With respect to noun phrases, on the other hand, there are indications that (de)accenting does have an influence on the NP's reference. Bosch (1988), for example, points out the influence of intonational markedness on the interpretation of definite noun phrases. Van Deemter (1994) discusses the role of accenting to indicate subsectional anaphors. Jäger (1998) shows that weak quantifiers are either interpreted existentially or as partitives depending on the type and the position of the accent. And Krifka (1999) argues for a class of "non-novel" indefinites, which presuppose their discourse referents and have to be deaccented.

Consider the definite *the shed* in (1). Depending on whether it is accented, the interpretation of the noun phrase is radically different. With an accent on *shed* we will conclude that there is exactly one shed belonging to John's cottage. But without the accent we have to interpret *the shed* as referring to the cottage itself, the speaker obviously making a disapproving comment. When there is an accent, the definite description refers to a shed distinct from John's cottage, thus introducing a novel discourse referent. But without the accent, the referent of the definite description has to be identified with a previously given discourse referent.

- (1) (John has an old cottage.)
(a) Last summer he reconstructed the SHED.
(b) Last summer he RECONSTRUCTED the shed.

This paper focuses on definite descriptions, i.e. full definite NPs. It will be shown that a definite description refers to a given discourse referent if the descriptive content is completely

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deaccented. But if there is a focused element within the descriptive content it introduces a novel referent. This amounts to allowing two readings for definite descriptions without, however, allowing two readings for the definite article.

This approach is, of course, based on a uniqueness view of definiteness. In particular, I will employ the account in Farkas (2000) and (2001). Farkas presents a notion of uniqueness subsuming familiarity: Definite expressions are "no-choice" either because they have to be identified with a given referent or because the descriptive content is unique in some respect. According to Farkas proper names and pronouns contribute an identifying condition whereas full definite NPs have to make use of their descriptive content to achieve uniqueness. Farkas argues that this difference in interpretation accounts for the different positions of proper names and pronouns, on the one hand, and definite descriptions, on the other, in the definiteness hierarchy discussed in the functional literature:

Definiteness hierarchy:²

personal pronoun/proper name > definite description > specific indefinite > non-specific indefinite

I will follow Farkas in interpreting definite noun phrases as being "no-choice" either via identity with another referent or via uniqueness of the descriptive content. I will, however, argue that her account of definite descriptions is too coarse grained. The difference in interpretation induced by accenting in (1) suggests that the previous division line between identifying definites and description-based definites should be shifted into the region of definite descriptions: Deaccented definite descriptions achieve uniqueness via identification with a given referent. But if there is an accent on the descriptive content, the definite achieves uniqueness by making use of its description, thus establishing a novel discourse referent:

pronoun/proper name > **given DD** > **non-given DD** > specific indefinite > non-specific indefinite
(identifying, (description-based,
deaccented) accented)

This paper is organized as follows: In the next section I will briefly discuss the uniqueness view on definiteness comparing Hawkins (1978, 1991) and Löbner (1985), then present Farkas' notion of "no choice" NPs and discuss why Farkas' story can't be all there is. In the third section the correspondence between (de)accenting and (non)-givenness will be shown. In the fourth section the different uses of definite descriptions will be spelled out within the DRT framework. Moreover, the non-given/given distinction will be related to the well-known attributive/referential distinction. In the concluding section we will come back to the scale of noun phrases in the definiteness hierarchy and have a brief look at pronouns and indefinites. Throughout this paper only singular definite descriptions (*the shed*, *the old shed*, *the shed of John's cottage*) in argument position will be considered.

2 The uniqueness view of definiteness

Definiteness is associated semantically either with familiarity/salience or with uniqueness.

²Cf. Aissen (2000), Farkas (2000)

According to familiarity/salience theories of definites, e.g. Heim (1982), Lewis (1979), the referent of a definite noun phrase is an entity which has been mentioned previously in the discourse or is prominent in the utterance situation. Uniqueness theories, on the other hand, regard definiteness as indicating that the referent is unique with respect to some pragmatically given domain. A review of the pros and cons of the two perspectives goes beyond the scope of this paper (cf. e.g. Hauenschild 1989, Lyons 1999). Distinguishing between given and non-given definite descriptions I will, of course, employ a uniqueness account of definiteness.

2.1 Hawkins (1978), (1991)

A particularly prominent account of the uniqueness perspective is Hawkins (1978) and (1991). Hawkins takes the anaphoric and deictic uses of definites as his starting point. The basic idea is that the use of a definite is felicitous if, within a pragmatically determined domain, there is exactly one entity satisfying the description (for plurals: there is a unique maximal set within the domain). Pragmatic domains, called P-sets, are sets of entities structuring the universe of discourse, and are provided by either the previous discourse, or the utterance situation, or general knowledge about relations between entities. The meaning of the definite article is defined relative to a P-set: "*The* conventionally implicates that there is some subset of entities, {P}, in the universe of discourse which is mutually manifest to Speaker and Hearer on-line, and within which definite referents exist and are unique." (Hawkins, 1991, p.414). Indefinites, as opposed to definites, conversationally implicate non-uniqueness.

For example, the noun phrase *the professor* may be felicitously uttered if there is a unique professor within the P-set established by the previous discourse. But it may as well be felicitously used if the situation or general world knowledge provides an appropriate P-set. Students arriving for a new class may, e.g., ask "*Who is the professor?*" because the situation provides a unique professor. Similarly, if a university class has been mentioned in the previous discourse, the use of *the professor* is felicitous because we know that university classes usually have a unique professor. The appropriate P-set may also be explicitly mentioned in the definite NP, as in *the professor of my linguistics class*, the P-set corresponding to the speaker's linguistic class. This way a definite NP may even re-establish a previous discourse set: *the professor we have just been talking about*.

Unlike definite descriptions, demonstrative expressions and pronouns, according to Hawkins, do not achieve uniqueness by making use of a P-set. They "will require a form of uniqueness relative to entities that are physically identifiable or textually introduced, without regard to P-sets" (Hawkins 1991 p. 416). The latter form of uniqueness, however, is not spelled out in the paper.

2.2 Löbner (1985)

Löbner (1985) presents a uniqueness theory of definites taking the opposite starting point, the paradigmatic cases being those where the definite article is required by the semantics of the noun. Nouns are classified into sortal nouns, which denote sets, e.g. *table*, and relational nouns, which involve an internal argument, e.g. *daughter* (of x). Within the class of relational nouns there are functional nouns, e.g. *mother* (there is exactly one mother of x). Since they have a unique value,

functional nouns require the definite article, i.e. *a mother* is not acceptable (unless *mother* is used in a sortal way).³

According to Löbner the definite article in all its uses indicates that the descriptive content has to be interpreted as a functional concept yielding a unique value.⁴ He distinguishes between "semantic definites" and "pragmatic definites". Semantic definites include proper names, indexical pronouns, and definite descriptions with a functional head noun. They represent a function independently of the particular situation the statement refers to (but may exploit the utterance situation). Pragmatic definites, in contrast, have sortal or (non-functional) relational head nouns. They do depend on the situation referred to and yield a functional concept by being functionally linked to another discourse referent (Löbner assumes a semantic network representation). The link may be explicitly given by a modifying expression or may be implicit. For example, *the woman Bill went out with last night* is regarded as a pragmatic definite yielding a functional concept by being linked to Bill by a going-out-last-night-with relation. Pragmatic definites with implicit links are supposed to account for the anaphoric cases, e.g., in "*Bill went out with a woman last night. The woman was nasty to him.*" the definite *the woman* is assumed to be linked to Bill implicitly (via going-out-last-night-with). In both cases the link has to be functional thus providing a functional concept interpretation for the definite NP.

Löbner proposes a uniform analysis of definite descriptions based on the idea that the definite article always indicates that the noun has to be interpreted as a functional concept. Viewing definiteness as indicating a function is intuitively appealing because the mathematical concept of a function gives us existence and uniqueness for free. Viewing definiteness as indicating a function, however, excludes the possibility of identification. Therefore Löbner has to capture anaphors by implicit functional links, as in the example above. But it will turn out that we need identification, too (cf. section 3.1).

2.3 Farkas (2000), (2001)

Farkas (2000)/(2001)⁵ starts from the so-called definiteness hierarchy which stems from cross-linguistic observations on the markedness of direct objects (cf. Aissen 2000). Different types of nouns phrases form a scale with respect to whether they tend to be case-marked when they occur in direct object position: Personal pronouns are on top of the scale, being most likely to be marked, followed by proper names, definite and demonstrative descriptions, specific indefinites and non-specific indefinites. Farkas rearranges the linear scale into a partial order, including demonstratives and partitives:

³Functional nouns may be used in a sortal way, e.g. if a caretaker in a kindergarten informs her colleague: *A mother has complained about the food.* Moreover, sortal nouns may also be used in a functional way, e.g., *table* is used functionally if someone points to an orange box and says: *The table is laid.*

⁴Löbner uses the term "functional concept" instead of "function" to stress the procedural aspect and indicate effective computability.

⁵Farkas (2000) discusses a typology of definites which is recapitulated in section 2 of Farkas (2001). I will mainly refer to the (2000) paper.

[personal pronouns, proper names] > [definite descriptions, demonstrative descriptions] > [partitives, specific indefinites] > non-specifics

Given this hierarchy, Farkas asks why noun phrases rank as they do. With respect to definites, i.e. pronouns, proper names and definite descriptions, she poses the questions (a) what makes them a natural class, and (b) what distinguishes pronouns and proper names on the one hand from definite descriptions on the other.

Farkas follows Hawkins in viewing definiteness as indicating uniqueness, subsuming familiarity as a special case of uniqueness. Her central notion is the notion of "determined reference" of a variable. The idea is that a variable introduced by a noun phrase has determined reference if the condition contributed by the noun phrase unequivocally determines the value the variable is to be given. This is explicated on the basis of DRT (Kamp & Reyle 1993): A variable introduced by a noun phrase has determined reference if for every update of an assignment function embedding the previous (input) DRS the value assigned to this variable is the same. Noun phrases introducing a determined reference variable are called "no-choice" because they require all embeddings of the output DRS to agree with respect to the value of the variable they introduce.

The notion of determined reference of a variable and no-choice NPs, respectively, implements uniqueness without referring to a particular domain within which the referent has to be unique. The only requirement is that there is no other choice for assigning a value to the variable. But the reason why a variable has a determined reference is deliberately left open because this is where pronouns and proper names depart from definite descriptions.

Pronouns are handled in the usual DRT manner, i.e. they introduce a variable x in the domain of the respective DRS and contribute an identifying condition $x=y$ where the newly introduced variable x is equated with a previously introduced antecedent variable y . Of course, requiring identity does not per se yield determined reference – in principle the variable could be identified with any of the variables previously given. But Farkas regards the question of whether there is an appropriate antecedent variable (and the question of how to find it) as a matter of felicity of use: Pronouns are felicitous only if there is a salient variable in the domain of the input DRS which can serve as the right hand side argument of the equation. Felicitously used pronouns come together with their antecedent thus contributing an identifying condition with a fixed right hand side argument, $x=y$. Due to the identifying condition the variable introduced by the pronoun has determined reference because every update of an assignment function embedding the input DRS has to satisfy the identity condition.

Deictic pronouns are treated similarly to anaphoric pronouns contributing an identifying condition, but the right hand side argument has to be a variable which is externally anchored to a salient individual. Proper names are assumed to induce an identifying condition of the form, e.g., $x=\text{Sarah}$, where the referent of the proper name stays constant across assignments and worlds. Thus anaphoric and deictic pronouns and also proper names achieve determined reference by contributing an identifying condition, directly linking the newly introduced variable to the entity serving as its value. Therefore, pronouns and proper names are said to achieve determined reference directly.

Definite descriptions, on the other hand, have to achieve determined reference by means of their

description. This is the case if the descriptive content denotes a singleton set, either due to its semantics (*the pope*) or due to linguistic properties of the expression (*the highest mountain on earth*). In the case of descriptions which do not denote singletons, Farkas follows Hawkins in assuming a restricted domain with respect to which the description is unique. The restricted domain is given by (a salient subset of) the values assigned to the variables that have already been introduced. For example, the noun phrase *the girl* is interpreted as "the unique element among (a subset of) the previously mentioned discourse referents which is a girl". Determining a unique element definite descriptions are no-choice noun phrases just like pronouns and proper names. The definite article is felicitous only if the noun phrase actually is no-choice.

With respect to the above questions Farkas states that (a) the class of semantically definite noun phrases is characterized by being no choice NPs, and that (b) the difference between pronouns and proper names on the one side and definite descriptions on the other stems from their different ways of achieving determined reference, either directly by introducing an identifying condition or by means of a description which denotes a unique element (possibly relating to a restricted domain). Pronouns and proper names outrank definite descriptions on the definiteness scale because they achieve determined reference directly.

In this paper, I will follow Farkas in taking a uniqueness perspective on definites and regarding anaphoricity as one way of achieving uniqueness. Furthermore, I will follow her in distinguishing between definite noun phrases that achieve determined reference directly by introducing an identifying condition, and those that achieve determined reference based on their description. I will, however, not adopt her view that definite descriptions uniformly achieve determined reference based on their description. There are two problems: First, on Farkas' account definite descriptions which don't involve singleton descriptions must refer to given referents and, second, their descriptions have to be unique within (a subset of) the domain of given referents. Both will turn out to be inadequate.

3 Given vs. non-given definite descriptions

The central claim in this paper is that even definite descriptions can come both ways, either contributing an identity condition or exploiting their descriptive content, depending on whether or not the descriptive content carries an accent. If deaccented, the definite represents an identity anaphor, similar to a pronoun. Let us call these uses "given definites". But if there is an accent on (part of) the descriptive content, the descriptive content has to be exploited and a novel discourse referent is introduced. Such definites are called "non-given" (which does not imply that there is no anaphoricity at all).⁶ The notion of given/ non-given definites, of course, refers to uses of definite descriptions. Throughout this paper we are talking about occurrences of definite descriptions in utterances, not about definite descriptions in isolation.

We will first turn to non-given definites demonstrating how they achieve uniqueness and showing that they need an accented part in their description. Next we will come to given definites

⁶They are called "non-given" instead of "novel" because they may involve a bridging anaphoric relation, see below.

showing that they have to be deaccented, and look into the role of their descriptive content. Subsequently, apparent counterexamples will be discussed.

3.1 Non-given definites

Let us first consider non-given definite descriptions. They provide prototypical counterexamples to familiarity theories because they don't refer to given referents. Familiarity theories handle these definites via accommodation, but we will regard them as introducing novel discourse referents (but see section 3.3). Since a non-given definite is not identical to a given discourse referent, it has to make use of its description to single out a unique referent. There are two possibilities: Either the description is such that it determines a unique referent by itself, or it needs the support of a "bridging" antecedent. Prototypical examples for self-sufficient descriptions are nouns that denote a singleton due to their semantics (*the pope*) or superlative constructions (*the smallest prime number*). Such descriptions may also involve adjectival modification, attributive genitives or restrictive relative clauses making use of an indexical element (*the Italian president*, *the president of Italy*, *the man who is elected for president in Italy*).

According to our claim there has to be an accent on at least part of the descriptive content if the definite is used as a non-given one.⁷ Compare (5)(a) and (b). In (5)(a) *pope* is accented. Since it is an out-of-the-blue utterance, the definite description obviously introduces a novel referent. In (5)(b) *the pope* is deaccented, rendering the utterance unacceptable in the beginning of a discourse. (6)(a)-(c) present examples for complex noun phrases. To be acceptable as an out-of-the-blue utterance, the entire descriptive content has to be accented, cf. (6)(a). Still, if at least part of it is accented, the definite is acceptable as introducing a novel referent, (6)(b)/(c).

- (5) (What's new?)
(a) Last week I met the POPE.
(b) # Last week I MET the pope.
- (6) (a) Last week I met the ITALIAN PRESIDENT/ the PRESIDENT of ITALY
(b) Last week I met the Italian PRESIDENT/ ITALIAN president.
(c) Last week I met the president of ITALY / the PRESIDENT of Italy.

If the description of a definite is not suited to single out a unique referent by itself, it needs the support of a "bridging" antecedent (we are still talking about non-given cases, i.e. excluding identity anaphors). Consider *the roof*, *the dean* and *the girl* in the examples in (7). In each of them the description is supported by a given referent to achieve uniqueness: The roof is part of the previously introduced cottage, the dean is supposed to be the dean of the faculty, and the girl is obviously a member of John's children.

- (7) (a) (John has an old cottage.) Last summer, he repaired the ROOF.
(b) (The faculty has a meeting.) It is chaired by the DEAN.
(c) (John has two children.) The GIRL is called Sue.

⁷We will for the moment ignore the difference between sentence accent and contrastive accent, cf section 3.3. Moreover, we will ignore additional accents occurring in the utterance.

Familiarity theories of definites regard these cases as being (implicitly) given because there is a relation to a given referent. However, if we assume that these definites are given, we would have to believe that whenever a discourse referent is introduced, all entities related to that referent are introduced simultaneously. Introducing the cottage referent in (7)(a), for example, would simultaneously trigger the introduction of the roof, the door, the kitchen, the mortgage, the previous owner, the landscape etc. This is improbable. But if we don't accept that all these entities are introduced together with the cottage referent, then we have to admit that *the roof* in (7)(a), although involving an anaphoric relation, does introduce a novel referent. The same argument applies to *the dean* in (7)(b): If you reject the idea that introducing a faculty referent simultaneously triggers the introduction of a dean referent, then you have to accept that the dean referent is novel. In (7)(c) the situation is slightly different because there is a plural referent which the girl is a member of. So it might be argued that the girl has in fact been introduced by introducing the children. But note that there is no chance for a pronoun to pick up the girl, we didn't even know that there is a girl among the children. This is strong evidence that *the girl* introduces a novel referent, too.

Let us call the antecedents employed by the definites in (7) "bridging antecedents", and the relation between the referent of the definite description and the antecedent a "bridging relation".⁸ The bridging relation may be a membership or part-of relation but may as well be some other relation to be inferred from the relata. Note, that the bridging relation need not be a function (membership is not a function). It is only the combination of the bridging relation and the description of the definite which yields uniqueness. For example, in (7)(a) being a part of John's cottage is by no means unique – the cottage will comprise more than one part. But being a part of John's cottage which is a roof has to be unique for the definite to be felicitous.

In (8) the example from the introduction is repeated. This example shows that it is the accent alone which tells us how to interpret the definite: With an accent on the descriptive part, the definite has to be interpreted as introducing a novel discourse referent. Since *shed* doesn't denote a singleton, the definite needs a bridging antecedent to achieve uniqueness. Thus in (8)(a) *the shed* is interpreted as the shed belonging to John's cottage and is newly introduced. If, however, the description is deaccented, as in (8)(b), the definite has to be identified with a previously given discourse referent. This is the reason why we infer that *the shed* refers to John's cottage and that the speaker is making a disapproving remark.

- (8) (John has an old cottage.)
(a) Last summer he reconstructed the SHED.
(b) Last summer he RECONSTRUCTED the shed.

The example in (9) is a similar one from van Deemter (1994). According to van Deemter, if the noun phrase *the women* is accented, it has to be interpreted as a subsectional anaphor referring to a proper part of the antecedent. From our point of view, being a proper part is just one of various possible bridging relations. As opposed to (8), the definite description in (9) is in the topic part of the sentence. Thus in (9)(a) the accent renders the definite a contrastive topic. Nevertheless, it triggers the introduction of a new discourse referent.

⁸The notion of an inferential "bridge" goes back to Haviland & Clark (1974). Our "bridging antecedent" is called an indirect antecedent there, e.g. *We checked the picnic supplies. The beer was warm.*

- (9) (The crowd was approaching the castle.)
 (a) The WOMEN were very EXITED.
 (b) The women were very EXITED.

Jäger (1998) discusses weak quantifiers in topic position and compares cases like (10)(a)/(b). Both (a) and (b) trigger a partitive reading interpretation of *three unicorns* (provided, according to Jäger, that the accent is a rising one). But depending on the position of the accent, the noun either denotes a property of the actual referent, cf. (a), or it denotes a property of the antecedent, cf. (b). In this respect, the examples in (10) are similar to the ones in (8) and (9).⁹

- (10) (a) There is a whole herd of unusual animals all around. Three UNICORNS are in the GARDEN.
 (b) There is a whole herd of unicorns all around. THREE unicorns are in the GARDEN.

That there is a correspondence between accenting and the reference of definite noun phrases has already been shown in Bosch (1988). Bosch uses the notions of explicit and implicit focus, the former representing entities mentioned in the preceding discourse and the latter representing entities from the overall scenario evoked by the preceding discourse. Referents in explicit focus are, in our terminology, given ones. Referents in implicit focus are non-given including the bridging cases discussed above. According to Bosch definite noun phrases, full NPs and personal pronouns alike, take their referents from explicit focus if they are deaccented, whereas intonationally marked definites draw upon implicit focus. His example in (11) is similar to the example in (8) showing that accenting prevents the definite from taking up a given referent: In (11)(a) the definites are naturally interpreted as referring to Jones, which is impossible in the (b) version.

- (11) When Jones returned
 (a) ... they ignored {him, the idiot, the bastard, the old goat, the pig}.
 (b) ... they ignored {HIM, the IDIOT, the BASTARD, the old GOAT, the PIG}.

Bosch actually gives an explanation for the difference in interpretation which comes close to the idea presented in this paper: Intonational markedness indicates that it is the descriptive content of the expression which is responsible for determining the referent. Without intonational marking, on the other hand, referents are determined via linguistic properties such as gender and number. Bosch, moreover, points out that in the intonationally marked case the description has to be taken literally, e.g. *the PIG* in (11)(b) has to refer to an animal, whereas in the unmarked case it may be used as a derogatory designation for a man. This is in line with the idea that in the marked case the description is decisive to determine the referent. We will come back to the *pig*-example in section 4.2.

Let us now briefly consider functional nouns, which in Löbner (1985) are the paradigmatic cases of definite descriptions. Consider *the roof* and *the dean* in (7)(a) and (b) above. The nouns are clearly functional in the sense of Löbner because (usually) a house has exactly one roof and a

⁹Jäger (2001), moreover, considers topical as against non-topical definites the former as against the latter being deaccented. He suggests to analyse topical definites in a Heimian way and non-topical definites in a Russelian way which is close to the proposal made in this paper.

faculty has exactly one dean. In (7)(a)/(b) the bridging antecedents required to achieve uniqueness obviously coincide with the implicit arguments of the nouns (the roof of John's cottage / the dean of the faculty). So we might regard the nouns as denoting a function taking the bridging antecedent as its argument, instead of assuming a separate bridging relation. However, there are bridging cases which do not involve a functional noun, cf. *the girl* in (7)(c) and *the women* in (9)(a). Therefore, although internal arguments of functional nouns make perfect bridging antecedents we cannot in general replace the bridging relation by using a functional concept.

Furthermore, Löbner's account does not explain the different interpretations in the *shed*-example in (8). We might say that in the accented case *shed* is used as a functional noun taking John's cottage as an argument, whereas in the deaccented case it is used as a sortal concept. Then in the accented case *the shed* is a semantic definite, whereas in the deaccented case it is a pragmatic definite. But being a pragmatic definite just means that the referent is somehow linked to another referent. It neither requires nor allows identification. Classifying the deaccented version of *the shed* as a pragmatic definite tells us that the referent has the property of being a shed and is implicitly linked to another referent. But the other referent could again be a shed standing next to John's cottage, which is against the facts. Doing without identification in favor of a uniform functional account obviously misses a crucial distinction in the interpretation of definite descriptions.

3.2 Given definites

Non-given definites have to make use of their descriptive content to determine the referent. They achieve uniqueness because their description denotes a singleton, possibly supported by a bridging antecedent. Given definites, in the sense employed here, are identity anaphors referring to a discourse referent which has already been introduced. Thus they come with an identifying condition. But identification as such does not yield a unique result, because usually there will be more than one discourse referent available. Consider *the man* in (12). There are four possible candidates for identification: the man, the bar, the suitcase, the barkeeper. The description *man* rules out the bar and the suitcase. But the barkeeper will probably be a man, too (cf. von Stechow 2000 for more examples of this type). Nevertheless we will not identify the referent of *the man* with the barkeeper. This, firstly, shows that the idea of narrowing down the domain of discourse referents until the descriptive content denotes a unique entity doesn't work (at least if narrowing down the domain means retaining the most recently introduced discourse referents and excluding the older ones). Secondly, it shows that the resolution of an identifying condition induced by a definite is determined by structural properties of the discourse, similar to the resolution of pronouns, the descriptive content of the definite providing only an additional constraint.

- (12) (A man came into the bar. He was carrying a black suitcase.)
The barkeeper stared at the man with sudden alarm.

The issue of anaphora resolution has been discussed in some detail in the literature, especially in the field of natural language processing. It is well-known that there are various properties contributing to the salience of a referent, e.g., agreement of gender/number, case, role, distance,

syntactic embedding, binding constraints, semantic compatibility etc. (cf., e.g., Preuss et al. 1994, Lappin & Leass 1994, Grosz et al. 1995). An anaphor is used felicitously if these properties single out a most salient discourse referent (corresponding to the intended antecedent).¹⁰ So Farkas skips an important step when saying that a pronoun introduces an identity condition $x=y$. In fact, an identity anaphor, pronouns and (given) definite descriptions alike, introduces half of an equation, $x=?$, and this is, first and foremost, a request to find a most salient antecedent. From this point of view, it is not the identifying condition but the existence of a most salient antecedent which meets the uniqueness requirement imposed by pronouns and given definite descriptions.

Since given definites make use of the order of salience to determine the referent, their descriptive content plays a minor role. Instead of determining the referent, as in the non-given case, it just provides a constraint: The descriptive content has to be compatible with the properties of the antecedent. Therefore, we will regard the descriptive content of given definites as being presupposed instead of asserted.¹¹ In most cases, the descriptive content mentions the property the referent has been introduced with, cf. (12), or it denotes a subsuming property (*A priest came into the bar. The man ...*), in both cases conveying information which is already known from the context. However, there are definite descriptions which are clearly identity anaphors (and, in fact, deaccented) coming with a novel descriptive content. In (13)(a) the referent of *the 34-year-old father of two teenage daughters* is identical with the previously mentioned defendant and could be substituted by a pronoun. Nevertheless, the description conveys information which cannot be inferred from the previous discourse.

- (13) (newspaper article reporting on a trial:
... This morning the court heard the defendant.)
(a) The 34-year-old father of two teenage daughters claimed to be innocent.
(b) The defendant, 34-year-old father of two teenage daughters, ...

Actually, the information additionally conveyed in the description in (13)(a) could also be added by way of an apposition or a non-restrictive relative clause, cf. (13)(b), thus confirming the idea that is not meant to restrict the denotation of a predicate. But instead, the information is presented as if it were already known. According to Geurts (1999) such information is backgrounded, backgrounded information differing from presupposed information in that the former may readily be accommodated whereas for the latter accommodation is a repair strategy.¹² To keep matters simple, we will not follow Geurts in distinguishing between backgrounded information and genuine presuppositions and regard the descriptive content of given definite descriptions as being presupposed. So, in case it is novel, the descriptive content has to be accommodated (which is not to be confused with the accommodation of a referent, cf. section 3.3)

¹⁰Note that the order of salience depends on the respective anaphor because it involves properties concerning the relation between antecedent and anaphor.

¹¹Apart from the fact that she takes definites to refer uniformly to given referents, this agrees with Heim's position that the descriptive content of definites is presupposed whereas for indefinites it is asserted, cf. Heim (1982)

¹²Moreover, backgrounded material behaves slightly different from common presuppositions with respect to projection, cf. Geurts (1999).

To sum up, given definites are identity anaphors, their descriptive material is presupposed, and they achieve uniqueness by exploiting the order of salience of antecedents instead of exploiting their descriptive content. There is a consequence which has often been neglected: The idea that a discourse referent once introduced is forever 'given' is a fiction. After a certain (rather small) number of ensuing sentences a referent is definitely not salient any more. But if a referent loses its salience, it is no longer available as an antecedent, in which case it cannot be regarded as being given. Introducing a discourse referent, after all, is just like putting someone on the stage. It will be pushed into the background step by step by its followers. If necessary it may be introduced again. Note, that re-introducing a non-salient referent by way of a non-given definite cannot cause confusion because the descriptive content has to be unique. For example, suppose, a dean referent is introduced into a discourse. Then the discourse continues with a debate about the curriculum etc. Finally, the speaker wants to come back to the dean. Assuming that the faculty is still available she can re-introduce the dean by using the faculty as a bridging antecedent ("*The DEAN [of the faculty] ...*") thus referring to the same dean individual as before.¹³

3.3 Counterexamples?

The claim in this paper is twofold, first, there are two uses of definite descriptions and, second, they are distinguished by intonation: Non-given definites carry an accent on (part of) the descriptive content, whereas given definites are deaccented.¹⁴ This predicts that there are no definites with a deaccented description which can not be identified with a previously introduced discourse referent, and that there are no definites bearing an accent on the descriptive part which do not introduce a referent. However, there seem to be counterexamples to this generalization.

Let us start with the deaccented/given part. Contrary to our claim, there are bridging-like cases which do not need an accent. For example, in (14) *the lock* seems to be preferably deaccented. Familiarity theories of definites would consider the lock as being given because it relates to the previously introduced apartment. However, it is implausible to presume that once a referent is introduced all entities related to this referent are introduced simultaneously (cf. section 3.1). For this reason we regard bridging definites as introducing a referent. Still, the lock in (14) seems to be so prominent due to the apartment/burglary/key context that it need not be introduced. So we have to concede that discourse referents may be accommodated thus short-cutting a proper introduction. When a referent is accommodated the context is a posteriori adjusted to include the referent, which must not be confused with the accommodation of a descriptive content, as in the example in (13). Accommodation of a referent must be strongly supported by situational and world-knowledge whereas descriptive content may be accommodated even if it is incidental.¹⁵

(14) (Somebody broke into my apartment while I was away. It seems that the burglar had

¹³Of course, from a DRT point of view, the latter dean variable has to be identified with the former one, which requires some inferencing.

¹⁴Note, that the claim is restricted to accents within the descriptive part of a definite, i.e. we exclude accented determiners, cf. section 5.

¹⁵This may be seen as confirming the distinction between backgrounded information and true presuppositions suggested in Geurts (1999).

a key, since) the lock/LOCK is UNDamaged.

With respect to the accented/non-given part the so-called contrastive cases seem to be problematic. In (15) *the girl* is preferably accented although it obviously refers to the girl referent introduced before. But it is well-known that the elements of a conjunction are notoriously bad antecedents because the plural referent established by the coordination phrase is more salient than its individual parts (cf. Preuss et al. 1994). Therefore, the accented version of *the girl* may well be understood as re-introducing the girl referent by using the plural referent as bridging antecedent ("the unique object which is a member of the boy-and-girl group and is a girl"). Note that this yields the same result as interpreting the deaccented *the girl* as an identity anaphor. Regarding the accented version of *the girl* as being bridged by the plural referent moreover accounts for the similarity of (15) and (7)(c) where the bridging antecedent was given by a plural noun phrase (*two children*) instead of a coordination phrase.

(15) (John has a boy and a girl.) The GIRL/girl is called Kim.

It is commonly assumed that contrastive cases are paradigmatic counterexamples for the correspondence of accent and novelty because contrastively accented expressions need not be novel (e.g. Schwarzschild 1999). A discussion of the semantics of (contrastive) focus is beyond the scope of this paper; suffice it to say that a contrastive focus, as opposed to a regular focus, evokes a set of alternatives (cf. e.g. Rooth 1992).¹⁶ The crucial problem with alternative sets is that of restricting their size, because a set of alternatives comprising all entities of appropriate type may give the wrong results. For example, suppose, Sam is the one who has to take care of the visiting guest groups. From (16) we can infer that Sam did not introduce any other member of the Dutch group to John. But we can not infer that Sam did not introduce anybody else to John. If, for example, Sam introduced some nice girls from a Finnish group to John, (16) would still be true. Therefore, the relevant set of alternatives for *the PROFESSOR* in (16) has to be restricted to comprise only members of the Dutch group. So the bridging antecedent of a definite plays a double role providing uniqueness and simultaneously restricting the set of alternatives (cf. Umbach 2001). From this point of view, contrastive definites must be linked to a bridging antecedent because the bridging antecedent is required to restrict the set of alternatives. But then contrastive definites have to be bridging anaphors instead of identity anaphors. Hence, for definites contrastiveness invariably comes with non-giveness.

(16) (Yesterday Sam met with a Dutch group.)
Sam/he only introduced the PROFESSOR to John.

The third apparent counterexample to be discussed is a variant of a famous example from Akmajian and Jackendoff (1970).¹⁷ The problem in (17) is two-fold, (a) why is accenting of the

¹⁶Since terminology in this field is notoriously confusing, let us for the moment distinguish between 'regular focus', which is due to the default sentence accent, and 'contrastive focus', which may come in any position in the sentence and is, e.g., associated with focus-sensitive adverbs. Moreover, we assume a model similar to Steedman (2000) such that contrastive focus may occur in the topic part and in the comment part of the utterance.

¹⁷The original example involved pronouns which, depending on whether they are accented or not, refer to a different antecedent (*John hit Bill, and then George hit him/HIM*).

definites possible although the referents have been introduced before? And (b), why is accenting of the definites necessary? The first part of the question can be answered as indicated above: Contrastive definites systematically (re)-introduce their referents via bridging to yield a restricted set of alternatives; in (17) the bridging antecedent for *the DEMONSTRATOR* and *the POLICEMAN*, respectively, is given by the afore mentioned clash (or the *hit*-event) restricting the sets of alternatives to the demonstrator and the policeman. The second part of the question is more difficult to answer. The definites obviously have to be accented because the event is of the same type. For this reason, it has been argued, the verb cannot be accented, so the definites have to be accented. But note that the event although of the same type cannot be the same instance as before, since the roles of the participants have changed. We have to leave this question to future research.

- (17) (Near the station there was a clash between a policeman and a demonstrator. The policeman HIT the demonstrator.)
Then the DEMONSTRATOR hit/punched/attacked the POLICEMAN.

To take accommodation and re-introduction of referents into account may appear to be a weakening of the given/non-given hypothesis of definite descriptions. However, compared to familiarity theories of definiteness, accommodation of referents is considerably restricted. Familiarity theories have to employ accommodation whenever a definite description is not an identity anaphor. As opposed to this, the given/non-given hypothesis only employs accommodation of a referent if a given, i.e. deaccented, definite is not an identity anaphor, whereas referents of non-given definites are introduced in line with indefinites. Moreover, irrespective of the contrastive cases the re-introduction of discourse referents has to be taken into account as soon as salience enters the game. Since salience is a short-lived matter, any dynamic account of definites has to comprise some mechanism of reviving discourse referents. Re-introduction by means of a non-given definite allows the revival of discourse referents in a straightforward way, exploring uniqueness (cf. the *dean*-example at the end of section 3.2).

4 Two uses of definite descriptions

4.1 Representation

To represent the two uses of definite descriptions we will employ a DRT framework following the presupposition-as-anaphors theory of van der Sandt (1992). According to van der Sandt anaphors are presuppositions (and vice versa) and have to be bound or accommodated. According to our assumptions here, given definites are identity anaphors and, therefore, have to be represented as presuppositions. Non-given definites, like indefinites, introduce a novel discourse referent, i.e. a variable which will not be bound. The descriptive content will be asserted, but the uniqueness condition will be treated as a presupposition. This accounts for the fact that the uniqueness condition cannot be affected by negation whereas the descriptive content can be denied (*Last summer, John reconstructed the SHED. – #No, there are several sheds*

belonging John's cottage – No, he reconstructed the HEN HOUSE.).¹⁸ Since the difference between the given and the non-given use of a definite description is indicated by (de)accenting, the DRT construction algorithm has to have access to a focus feature which reflects the accent.¹⁹

For example, in (18) *pope* carries an accent indicating non-givenness. So the definite triggers the introduction of a novel variable *y* together with the assertion that *y* is a pope, and it triggers the presupposition that *pope* denotes a singleton (presuppositions are indicated by underlining). The uniqueness presupposition will finally be accommodated.²⁰

- (18) (a) John met the POPE.
 (b) [x, y: x=John, pope(y), met(x,y), [[z: pope(z)]] -->[: z=y]]]

In (19) the first sentence is represented by the DRS in (19)(b). In the second sentence *girl* is deaccented. So the definite induces the presupposition that there is a referent *z* satisfying the girl-predicate. Being presupposed the variable *z* has to be bound. (This amounts to an identifying condition *z=?*). Updating of (19)(b) with (19)(d) results in (19)(e), where the presupposed girl-referent has been bound to the previously introduced girl-referent (assuming that this is the most salient referent which is a girl), and the second girl-condition has been bound by the first one.

- (19) (a) John met a girl.
 (b) [x, y: x=John, girl(y), met(x,y)]
 (c) The girl was BEAUTIFUL.
 (d) [: beautiful(z) [[z: girl(z)]]]
 (e) [x, y, z: x=John, girl(y), met(x,y), z=y, beautiful(z)]

In (20) and (21) the different readings of the *shed*-example are demonstrated. In (20)(c) *shed* is accented thus introducing a referent together with the assertion that it is a shed. Since *shed* doesn't denote a singleton (due to lexical and/or world knowledge) uniqueness has to be achieved by the help of a bridging antecedent. So the definite triggers the presupposition that there is a bridging antecedent *w* together with a bridging relation *R*, such that the shed-referent is unique with respect to being *R*-related to *w* and being a shed. Updating (20)(b) with (20)(d) results in (20)(e) where the presuppositions are resolved by binding *u* and *w* to John and the cottage-referent, respectively. The fact that the bridging relation holds between the cottage-

¹⁸If the definite is in topic position, denial of the descriptive content will not be possible either. However, this restriction follows from the characteristics of the topic (as opposed to the comment part), a matter which will be neglected here.

¹⁹We may either assume separate focus features for regular and contrastive focus, or assume a general focus feature and indicate special foci by additional features. The latter conception would call for a general semantic characterization of focus, which is an ambitious endeavour. Still, with respect to definite descriptions, we might say that focus primarily indicates that the interpretation has to exploit the descriptive content, and contrastive focus, in addition, evokes a set of alternatives (see also Umbach 2001).

²⁰Presuppositions induced by pronouns and proper names will be neglected in the examples.

referent and the shed-referent as well as the uniqueness condition have been accommodated.²¹

- (20) (a) John has an old cottage.
 (b) [x, y: x=John, oldCottage(y), owns(x,y)]
 (c) He reconstructed the SHED.
 (d) [v: shed(v), reconstructed(u,v) [u, w: R(w,v), [[z: R(w,z), shed(z)] -->[: z=v]]]]
 (e) [x, y, u, v, w: x=John, oldCottage(y), owns(x,y), u=x, w=y, shed(v), reconstructed(u,v), R(w,v), [[z: R(w,z), shed(z)] -->[: z=v]]]

In (21)(b) *shed* is deaccented indicating that it is an identity anaphor. Thus the discourse referent together with the descriptive condition are presupposed, cf. (21)(c). Updating with the input DRS (= (20)(b)) returns the DRS in (21)(d), where the shed referent is bound to the cottage referent. The descriptive presupposition, i.e. that this referent is a shed, has to be accommodated.

- (21) (a) John has an old cottage.
 (b) He RECONSTRUCTED the shed.
 (c) [: reconstructed(u,v) [u,v: shed(v)]]
 (d) [x,y,u,v: x=John, oldCottage(y),owns(x,y), u=x, v=y, shed(v), reconstructed(u,v)]

Comparing this analysis with the account of definites proposed by Farkas, it becomes clear that under our account given definites go with pronouns achieving determined reference via identification/binding. It is only the non-given ones that have to make use of their descriptive content to achieve determined reference. Moreover, the latter do not require uniqueness with respect to (a subdomain of) the discourse referents introduced before, but with respect to the world, in most cases being supported by a bridging antecedent. The analysis of definite descriptions given here doesn't agree with Farkas' analysis of definite descriptions. But it does agree with her analysis of definites in general, making a clear distinction between definites which are no-choice because of identification/binding and definites which are no-choice by description.

This analysis of definite descriptions admits two uses of definite descriptions, a Fregean/Strawsonian use and a near-Russellian use.²² But it does not admit two readings of the

²¹R is assumed to be an underspecified relation that may be made more specific, e.g. element-of or part-of relation, by world knowledge inferences. Identity is to be excluded, because otherwise the shed referent could be identified with the cottage referent.

²²Strawson himself conceded that, in case the reference fails, a statement containing a definite description may either fall into a truth-value gap or be false. Interestingly, he uses the notion of topic to distinguish these two cases: When a definite description occurs as the topic of a statement, failure of reference will result in a truth value gap, the statement being neither true nor false. But if the definite occurs within the predicate part, failure of reference will cause the statement to be false. For example, if "*The king of France is bald.*" is intended as a statement about the king of France, it can neither be true nor false (assuming that there is no king of France). But if the same statement is supposed to be an answer to the question "*What examples, if any, are there of famous contemporary figures who are bald?*" then it is just false. Similarly, the statement that "*The exhibition was visited yesterday by the king of France.*" is intuitively false instead of lacking a truth-value (cf. Strawson 1964). Strawson employs a rather rough notion of (Fortsetzung...)

definite article. The definite article *the* is assumed to uniformly indicate that the referent is unique and can be identified, either making use of the order of salience or making use of the descriptive content.²³ The two uses are can be separated due to accenting and deaccenting, respectively, which is a feature realized on the surface of the linguistic expressions. Thus the two uses must not be regarded as an ambiguity which is left to the hearer to be resolved. Instead, the speaker indicates the intended use by intonation, and if it doesn't match with the context, the utterance will not be felicitous.²⁴

4.2 Referential vs. attributive use

Naturally, the idea that there are two uses of definite descriptions is not a novel one. It was first proposed by Donnellan (1966) who distinguished between a referential and an attributive use of definite descriptions. The attributive use is similar to Russell's view of definite descriptions assuming that the description is part of the assertion. The referential use comes close to Frege's or Strawson's view where the existence of an appropriate referent is regarded as a presupposition. But there is a crucial difference between Donnellan's referential use and the Strawsonian interpretation which will be discussed below.

Donnellan's famous example is "*Who is the man with the martini?*". To determine whether the definite description is used attributively or referentially we have to take the particular occasion into account on which the question is used. Suppose the chairman of a teetotalers meeting is informed that someone in the room is secretly drinking a martini; then he may ask the above question without having a particular person in mind. But if the same question is asked by a guest at a party seeing an interesting-looking person holding a martini glass, then the question will be about that particular person. In the former case the definite description is used attributively, the question being about whoever or whatever fits the description. In the latter case the definite description is used referentially, to pick out a particular person the speaker has in mind. Thus, in the attributive use the referent has to be determined solely by means of the description whereas

²²(...Fortsetzung)

aboutness-topic, without considering accenting. But note that the cases where failure of reference leads to falsity instead of a truth-value gap require an accent in the definite's description:

"*The exhibition was visited yesterday by the king of FRANCE.*"

"*What examples, if any, are there of famous contemporary figures who are bald? – The king of FRANCE is bald.*"

²³To give a uniform semantic representation of the definite article we would have to take the bridging case as the starting point, roughly: $[\textit{the B F}] = \epsilon x. F(x) \wedge \exists y.R(x,y) \wedge \forall z.R(z,y) \rightarrow B(z) \wedge \forall z.R(z,y) \wedge F(z) \rightarrow z=x$ (where B denotes the deaccented part and F denote the accented part of the description, both being subsumed by some universal predicate.) The case of semantically unique predicates (*the pope*) could easily be adapted by allowing the bridging relation to be identity ($x=x$). In the case of identity anaphors the relation should be identity, too. But in this case identity has to be acquired by binding the variable to a previously introduced one ($x=?$). However, this is a meta-level requirement, which cannot be stated within the formula, but has to be given by an additional constraint, e.g. "if there is no accented part of the description, $\exists y.R(x,y)$ has to be satisfied by binding x to a previously introduced variable". Moreover the difference with respect to what is presupposed is not expressed.

²⁴Of course, in written text there is no intonation. But there will presumably be hints as to which use is intended, e.g. by the position of the definite within the sentence.

in the referential use the referent is already fixed, and the description may be seen as accompanying a demonstration act. This is why Kaplan paraphrases the referential use by a demonstrative: "*Who is that man with the martini?*" or "*Who is that?*" followed by an appositive, parenthetical, whispered "*the man with the martini*" (Kaplan 1989, Afterthoughts, p. 583)

Donnellan does not argue in terms of givenness or novelty of discourse referents and, of course, he is far from taking accenting into account. Nevertheless the referential/attributive distinction seems to correspond to the given/non-given distinction made in this paper: Non-given definites and attributively used definites both require that the referent is determined solely by means of the descriptive content. As for the given-referential correspondence, we have to include deictic cases of given definites, in addition to identity anaphors. If used deictically the demonstration act instead of the order of salience will determine the referent (and the variable has to be anchored externally, cf. Farkas' treatment of deictic pronouns, section 2.3). Given definites as well as referentially used definites then involve direct reference, the descriptive content being mere auxiliary information.

The correspondence between the given/non-given distinction and the referential/attributive distinction is confirmed by considering the accents: In the referential use the description has to be deaccented, whereas in the attributive use an accent must be present, consider (22) and (23) below. In (22), to trigger the referential use of *the man with the phone* assume a situation like this: Sherlock Holmes and Watson are chasing a drug dealer gang. They are sitting in a bar watching a clandestine meeting. One of the suspects makes a call on a mobile phone and then starts to leave the bar. In this situation Holmes advises Watson:

(22) FOLLOW the man with the phone.

To demonstrate the attributive use, assume that Holmes and Watson are still on their way to the bar where the gangsters will meet, and Holmes tells Watson what to do:

(23) (One of the men will have a cell phone. They will wait for a phone call and then leave separately.)
Follow the man with the PHONE.

But there is a problem: Donnellan, on the one hand, explicitly says that by using a definite referentially "the speaker presupposes of some particular someone or something that he or it fits the description" (p. 288). On the other hand, he assumes that the referential use of a definite is felicitous (and the statement has a truth value), even if the description does not apply to the referent. For example, the interesting-looking person the speaker is curious about may actually be drinking water, but nevertheless, in the referential use *the man with the martini* refers to this particular person. This is the point where Donnellan departs from both Russell and Strawson, since on their analyses, regardless of whether asserted or presupposed, the description has to apply to the referent.

One may shift this problem into the area of pragmatics allowing for some sort of amendment as long as there is sufficient similarity (martini may be similar to water or white wine, but not to tomato juice). However, the *pig*-example discussed in Bosch (1988) indicates that the

discrepancy in the referential use between the description and the actual properties of the referent is a systematic one: If a definite description is accented it cannot be used as a derogatory epithet but has to apply literally. For example, the accented variant of *the pig* in (24) has to refer to an animal instead of a person, be it Jones or someone else. The deaccented version, as against that, licenses both interpretations.²⁵

(24) When Jones returned they ignored the PIG/pig.

Coming back to the drug dealer scenario, suppose that Holmes is very upset because his own daughter is addicted to drugs. Then, in the situation where they are sitting in the bar watching the men, Holmes can give Watson the order in (25) instead of the one in (22). But in the situation where they are still on their way to the bar, if Holmes would utter (26) instead of (23), Watson would be completely lost because presumably there is no such animal in the bar.

(25) FOLLOW the pig.

(26) Follow the PIG.

Evidently, in the referential case, but not in the attributive one, *pig* can be used as a derogatory designation for the drug dealer. This, firstly, confirms Donnellan's claim that in the referential use the referent need not exactly fit the description. Secondly, occurring systematically with derogatory expressions we can no longer attribute the effect to some sort of accidental similarity, as in the case of martini looking like water. We may try an explanation along the following lines: In the attributive use, the description is the only information available to determine the referent; therefore, the referent must fit the description. In the referential use, on the other hand, the description has a mere auxiliary function, the demonstration being decisive to determine the referent; therefore, the descriptive information need not perfectly match with the referent's properties. Still, there are two awkward questions left: (a) How much deviation is possible? – *the man with the martini* will not work for a man with tomato juice, and (b) what are we to make of a description like the derogatory use of *pig*, which can occur in a presupposition and also as a predication, but is unsuited to single out a referent?

5 Conclusions

Let us now come back to the scale of noun phrases in the definiteness hierarchy. The analysis of definite descriptions given here is perfectly compatible with Farkas' distinction between definites making use of identification and definites making use of their descriptive content. It departs from Farkas' analysis only with respect to the division line: While Farkas assumes that pronouns and proper names make use of identification, and definite descriptions, on the other hand, are uniformly description-based, it has been shown in this paper that the division line lies within the area of definite descriptions the distinction being indicated by the intonational features of the

²⁵Ladd (1996) discusses a similar example: "A: Everything OK after your operation? B: Don't talk to me about it! I'd like to STRANGLE the butcher / strangle the BUTCHER!" According to Ladd, the epithet meaning can also be signalled by a secondary H* accent (B accent, following Bolinger), when the word in question is not sentence final: "B: The butcher (H*) charged me a thousand bucks(H*LL%)"

expression.

Taking the full scale of noun phrases into account, the question arises of how accenting affects the end points of the scale, i.e. pronouns and proper names, on the one side, and indefinite noun phrases, on the other. Pronouns and proper names may be accented too. So we might assume that they also introduce a referent when accented. There are examples supporting this idea. In (27), e.g., the pronouns obviously do introduce novel referents, and in fact they have to be accented. Following Bosch (1988) we could argue that the accented pronouns in (27) exploit their minimal descriptive content, i.e. being male or female, to establish a novel referent via bridging to the couple referent. But there are also examples which do not support this view. Actually, accented pronouns and proper names are prototypical counterexamples to the focus-novelty correspondence, cf. the example in (28) from Schwarzschild (1999).

(27) (Last week I met a remarkable couple.)
HE looks after the children and SHE makes a lot of money.

(28) (Who did John's mother vote for?)
She voted for HIM / JOHN.

Schwarzschild concludes from these examples that although lack of intonational prominence indicates givenness, the converse doesn't hold: It is not the case that prominence indicates novelty. In this paper we have seen that within certain limits, i.e. related to the descriptive part of definite descriptions, the converse does hold. But we have deliberately excluded cases where the accent is on the definite article itself, or a on demonstrative, as in (29):

(29) (a) We have found THE man for the job.
(b) (Witness pointing to one of the defendants:)
I saw THIS man coming out of the bank.

In (29) accenting just indicates that there are alternatives; in (a) uniqueness seems to be contrasted with non-uniqueness, and in (b) the alternatives presumably comprise other demonstration acts the witness could have made. The (b)-example, by the way, suggests that with respect to pronouns accenting may be ambiguous, either concerning the minimal descriptive content, or concerning the referential capacity.

Considering indefinite noun phrases, at the other end of the scale, Krifka (1999) argues for a special class of "non-novel indefinites" that presuppose their discourse referents and have to be deaccented. Evidence for this class stems, e.g., from adverbial quantification as in (30)(a)/(b).²⁶ The domain of quantification is given by the deaccented indefinite, which forces us to assume that deaccented indefinites may pick up existing referents and "requantify" over them.

(30) (a) A freshman usually wears a BASEBALL cap.
('most freshmen wear a baseball cap')

²⁶These are examples (1)(a)/(b) in Krifka (1999). Note that "non-novel" indefinites are not "given" in the sense used here because they are not identity-anaphors.

- (b) A FRESHMAN usually wears a baseball cap.
(‘most wearers of baseball caps are freshmen’)

Krifka's non-novel indefinites suggests that deaccenting goes with specificity. However, the indefinite in (31)(a), though deaccented, is clearly non-specific introducing a novel referent.²⁷ Deaccenting in (31)(a) appears to be due to the presupposition induced by *only*, i.e. that Sue owns a motor cycle. But if the indefinite is substituted for by a non-given definite, the definite retains the accent although it is part of the presupposition of *only*, cf. (31)(b).

- (31) (a) Only SUE owns a motor cycle.
(b) (... Yesterday, the Dutch group visited the faculty)
But only SUE met the DEAN.

Apparently, although accenting may have some influence on the reference, the accent-novelty correspondence observed for definite descriptions doesn't readily carry over to pronouns and indefinites, thus confirming their position at either end of the definiteness scale.

References

- Aissen, J. (2000) Differential Object Marking: Iconicity vs. Economy. ms. (cf. <http://ling.ucsc.edu/~aissen>)
- Akmajian, A. & Jackendoff, R. (1970) Coreferentiality and stress. *Linguistic Inquiry* 1.
- Bosch, P. (1988) Representing and Accessing Focussed referents. *Language and Cognitive Processes*, 3, 207-231.
- van Deemter, K. (1994) What's New? A Semantic Perspective on Sentence Accent. *Journal of Semantics* 11.
- Donnellan, K. (1966) Reference and Definite Descriptions. *Philosophical Review* 75, 281-304.
- Eckardt, R. (1996) Intonation and Predication. *Arbeitspapiere des SFB 340*. Universität Düsseldorf, Seminar für Sprachwissenschaft.
- Farkas, D. (2000) Varieties of Definites. Talk given at the Antwerp Colloquium on the Syntax and Pragmaseantics of Noun Phrases, February 2000. (cf. <http://ling.ucsc.edu/~farkas>)
- Farkas, D. (2002) Specificity Distinctions. To appear in *Journal of Semantics*.
- Geurts, B. (1999) Specifics. In: Geurts, Krifka, van der Sandt (eds.) *Focus and Presupposition in Multi-Speaker Discourse*. ESSLLI 99, Utrecht, 99-129.
- Grosz, B., Joshi, A., Weinstein, S. (1995) Centering: A Framework for Modelling the Local Coherence of Discourse. *Computational Linguistics* 21 (2), 203-225.
- Hauenschild, Ch. (1989) Definitheit. In Jacobs, J., von Stechow, A., Sternefeld, W., Vennemann, T. (eds.) *Handbuch Syntax*. de Gruyter, Berlin.
- Haviland, S.E. & Clark, H.H. (1974) What's new? Acquiring new information as a process of comprehension. *Journal of Verbal Learning and Verbal Behavior*, 13, 515-521.
- Hawkins, J. (1978) Definiteness and Indefiniteness. *A Study in Reference and Grammaticality*

²⁷Adapting an example from Eckardt (1996): *Sogar ARNIM besitzt einen Mercedes* ("even Arnim owns a Mercedes"), which shows that existential (as opposed to generic) indefinites need not be accented. Eckardt concludes that an accent due to a focus-sensitive particle overwrites a default sentence accent. In (31)(b), however, the accent on *dean* is not overwritten by the accent on *Sue*.

- Prediction. Croom Helm Ltd., London.
- Hawkins, J. (1991) On (in)definite articles: implicatures and (un)grammaticality prediction. *Journal of Linguistics* 27, 405-442.
- Heim, I. (1982) The semantics of definite and indefinite noun phrases. Dissertation, University of Massachusetts, Amherst.
- von Heusinger, K. (2000) Anaphora, Antecedents, and Accessibility. *Theoretical Linguistics* 26, 75-93.
- Jäger, G. (1998) Topic, Focus and Weak Quantifiers. In Bosch, P., van der Sandt, R. (eds.) *Focus and Natural Language Processing*. Cambridge University Press.
- Jäger, G. (2001) Topic-comment structure and the contrast between stage level and individual level predicates. To appear in *Journal of Semantics*.
- Kamp, H. & Reyle, U. (1993) *From Discourse to Logic*. Kluwer Academic Publishers.
- Kamp, H. (2000) Presupposition Computation and Presupposition Justification: One Aspect of the Interpretation of Multi-Sentence Discourse. Tutorial in *Computational Linguistics*.
- Kaplan, D. (1989) Demonstratives. In Almog, Perry, Wettstein (eds.) *Themes from Kaplan*. Oxford University Press.
- Krifka, M. (1999) Non-novel Indefinites in Adverbial Quantification. C. Smith (ed.), *Workshop proceedings: Non-narrative Discourse*, Texas Linguistics Forum, University of Texas.
- Ladd, R. (1996) *Intonational Phonology*. Cambridge University Press.
- Lappin, S. & Leass, H. (1994) An algorithm for pronominal anaphora resolution. *Computational Linguistics* 20, 535-561
- Lewis, D. (1979) Scorekeeping in a Language Game. In Bäuerle, Egli, Stechow (eds.) *Semantics from a Different Point of View*. Springer, Berlin.
- Löbner, S. (1985) Definites. *Journal of Semantics* 4, 279-326.
- Lyons, Ch. (1999) *Definiteness*. Cambridge University Press.
- Preuss, S., Schmitz, B., Hauenschild, Ch., Umbach, C. (1994) Anaphora Resolution in Machine Translation. In: Ramm, W. (ed.): *Text and Context in Machine Translation*. *Studies in Machine Translation and Natural Language Processing*, Vol.6, 29-52.
- Rochemont, M. S. (1986) *Focus in generative grammar*. Benjamins, Amsterdam.
- Rooth, M. (1992) A Theory of Focus Interpretation. *Natural Language Semantics* 1.
- van der Sandt, R. (1992) Presupposition Projection as Anaphora Resolution. *Journal of Semantics*, 9, 333-377.
- Schwarzschild, R. (1999) GIVENNESS, AvoidF and other Constraints on the Placement of Accent. *Natural Language Semantics*.
- Steedman, M. (2000) Information Structure and the Syntax-Phonology Interface. *Linguistic Inquiry* 31,4, 649-689.
- Strawson, P.F. (1964) Identifying Reference and Truth-Values. In Strawson (1971) *Logico-Linguistic Papers*. Methuen, London.
- Umbach, C. (2001) Restriktion der Alternativen. In Steube, Umbach (eds.) *Kontrast – lexikalisch, semantisch, intonatorisch*. *Linguistische Arbeitsberichte* 77, Inst. für Linguistik, Universität Leipzig.