

*On Indefinite Descriptions**

VILLY ROUCHOTA

1. Introduction

It is widely acknowledged in the literature (Chastain 1975, Wilson 1978, Donnellan 1978, Fodor and Sag 1982, King 1988, Ludlow and Neale 1991) that indefinite descriptions may be interpreted in at least two ways: attributively or referentially. For example, suppose that all the computers in our building behave strangely, so you call the computer centre to ask for help. When you hang up you say:

- (1) A computer expert will come to have a look

In this context the indefinite description "a computer expert" is used attributively. The hearer is expected to understand that some computer expert or other will come to take a look at the computers.

Suppose now that you are going out tonight with Peter who has been courting you for a long time. You have agreed that he will meet you at the little coffee shop opposite your house. I know this arrangement and looking out of your window I tell you:

- (2) An admirer of yours is waiting for you at the coffee shop

In this context the hearer is intended to realise that it is Peter who is waiting for her. The speaker is using the indefinite description "an admirer of yours" referentially, i.e. to pick out a particular individual.

This behaviour of indefinite descriptions parallels the distinction made by Donnellan (1966) between attributively and referentially used definite descriptions. As with definite descriptions, the question arises with respect to indefinite descriptions whether or not they are semantically ambiguous. In the first part of this paper I will argue against the semantic ambiguity position and

*I would like to express my thanks to R. Carston, D. Wilson and N. Smith for their insightful comments on earlier drafts of this paper. I am also indebted to J. van de Koot, M. Brody and W. Chao for interesting discussions. Finally, I would like to thank the State Scholarship Foundation in Greece for financially supporting my research at UCL.

in favour of a pragmatic account of the various ways in which an indefinite description may be used. In later sections I will show how a psychologically plausible explanation for these uses can be given within relevance theory on the assumption of a univocal linguistic semantics for indefinite descriptions.

2. Are indefinite descriptions ambiguous?

2.1. Preliminary considerations

Before I discuss the various arguments that have been brought forward to support the semantic ambiguity thesis, I want to explain why an analysis which assigns a univocal semantics to indefinite descriptions and treats their uses in pragmatic terms is *prima facie* preferable to a semantic ambiguity based analysis.

Some relevant considerations have been pointed out by Kripke (1977). Kripke's discussion focuses on definite descriptions but most of his arguments apply to indefinite descriptions as well. According to Kripke, we could consult our intuitions, independently of any empirical evidence: would we be surprised if we found two languages with two different words for the alleged two senses of indefinite descriptions? The answer seems to me to be positive, which suggests that our expectations favour a unitary semantic account of indefinite descriptions. Then, Kripke says, we could investigate whether there are in fact languages which have two distinct words to express the two allegedly distinct senses. If no such language is found, then this is evidence in favour of a univocal semantic analysis of indefinite descriptions. Such an investigation has not been undertaken, so nothing conclusive can be said. Nonetheless, it is a fact that whereas uncontroversially ambiguous words like "bank" tend to be translated in other languages in two different words (as, for example, in French or in Greek), these languages have only one word for the indefinite article.

Considerations hinging on building a semantic theory as economically as possible, usually expressed in terms of the Modified Occam's Razor "do not multiply senses beyond necessity", also favour a unitary semantic account for indefinite descriptions. On this view, the various uses of indefinites would have to be explained on the basis of general communicative principles of the sort proposed by Grice (1975), the need for which is independently motivated.

In addition to such methodological considerations there are two observations which in my view strongly favor a pragmatic account of the two uses of indefinite descriptions over a semantic one. First, indefinite

descriptions are not the only type of linguistic expressions which allow both an attributive and a referential reading. Consider the interpretation of the definite description in (3):

- (3) The murderer of Smith is insane

As was first pointed out by Donnellan (1966), depending on the context of utterance, the definite description in (3) may have two interpretations, as in (4) and (5), corresponding respectively to the attributive and the referential use:

- (4) The murderer of Smith, whoever he is, is insane
(5) The murderer of Smith, Jones, is insane

Moreover, quantifiers also admit of a referential interpretation. For example, suppose it is common knowledge that Smith is the only person taking Jones' seminar. One evening Jones throws a party and Smith is the only person who turns up. When asked next morning whether his party was a success, Jones utters (6):

- (6) Well, everyone taking my seminar turned up

intending to communicate that only Smith turned up.¹ In this context (6), which contains a universal quantifier, is used to communicate a singular proposition.

Since not only indefinite descriptions but definite descriptions and quantifiers as well are susceptible to referential uses, it is more likely that whether these expressions are used referentially or non-referentially is a pragmatically determined aspect of the interpretation of the utterance. Otherwise, one would have to pursue the claim that not only indefinites but also definite descriptions and more crucially quantifiers are semantically ambiguous.²

¹Example (6) is taken from Neale (1990: 87). The point about quantifiers admitting of a referential interpretation is attributed by Neale to Sainsbury (1979).

²For arguments against the claim that definite descriptions are semantically ambiguous see Kripke (1977), Neale (1990), Rouchota (1992). As far as I know, no one has tried to argue that quantifiers are semantically ambiguous between attributive and referential uses.

Second, the attributive and the referential interpretations are not the only readings that indefinite descriptions may have. Suppose, for example, that Peter wants to know what I did on Sunday and I say:

(7) A friend of mine from Cambridge paid me a visit

In this case the speaker communicates that she is speaking about a particular individual; she does not, however, intend Peter to realise who this individual is. The speaker may want to conceal from Peter the identity of this friend or she may want to avoid bothering Peter with details that she considers irrelevant. This use of the indefinite description is neither attributive nor referential (since the speaker does not intend the hearer to pick out the particular individual she is talking about). Following Ludlow and Neale (1991) I will call this use *specific*.

In addition to the attributive, the referential and the specific use, indefinite descriptions exhibit at least two more distinct uses, the predicative and the generic use :

(8) John is a teacher

(9) A pig likes to roll in the mud

So, it seems that if indefinite descriptions are semantically ambiguous then they are not two ways ambiguous but at least five ways ambiguous. Such a proliferation of the senses of indefinite descriptions makes the semantic ambiguity thesis even less attractive.³

Considerations of the type mentioned in this section only suggest that a pragmatic account of the various uses of indefinite descriptions is preferable to the stipulation of a semantic ambiguity. In the following sections I will consider the arguments usually invoked in favor of the semantic ambiguity thesis and I will show that under closer scrutiny none of them offers good evidence for this thesis.

³I will have nothing more to say about the predicative and the generic uses of indefinites in this paper.

2.2. Truth conditions

Many philosophers and linguists, for example Chastain (1975), Wilson (1978) and Stich (1986), claim that indefinite descriptions must be semantically ambiguous because they make different contributions to the truth conditions of the utterances that contain them depending on whether they are used attributively or referentially.

On this view, (1), repeated below,

- (1) A computer expert will come to have a look

where the indefinite description is used attributively, will be true so long as the set of computer experts who will come to take a look at our computers is non-empty. (2), on the other hand,

- (2) An admirer of yours is waiting for you at the coffee shop

where the indefinite description is used referentially, will be true if and only if the particular man to whom the speaker intended to refer, i.e. Peter, is waiting for the hearer at the coffee shop. The proposition expressed by the utterance on this use of the indefinite description contains some representation of the intended referent. If it turns out that the individual to whom the speaker intended to refer is in fact not waiting for the hearer, the proposition the speaker intended to communicate with her utterance will be false (even if some other admirer of the hearer, say John, is waiting for the hearer).

There are two points to be made here. First, intuitions about the truth conditions of (2) and similar utterances are quite fuzzy. Many people would say that (2) in the context given above is true simply if there is at least one admirer of the hearer such that he is waiting for her at the coffee shop. Second, even if some representation of the intended referent contributes to the truth conditions of (2) it does not follow necessarily that indefinite descriptions are semantically ambiguous.

It has been convincingly argued within relevance theory that the standard claim that different truth conditions mean different semantic representations is wrong (Sperber and Wilson (1986), and Wilson (1991)). On the relevance view, there are two types of semantics: *linguistic semantics*, which has to do with the mapping of linguistic expressions on to concepts, and *semantics of mental/conceptual representations*, which assigns truth conditions to the proposition expressed by an utterance in a particular context. These two levels are mediated by pragmatic derivation of content. For example, according

to Carston (1988, forthcoming) the linguistic semantics of "and" is equivalent to the logical connective "&", as Griceans have argued. Now, in an utterance like "She had worked hard and she was tired" the speaker typically intends to communicate that there is a consequence relation between the two conjuncts. So, one of the propositions communicated is "She worked hard and as a result of that she was tired", the truth conditions of which differ from the truth conditions of P&Q. Griceans treat this proposition as an implicature of the original utterance and hence not part of the proposition expressed by the utterance. Carston, however, has shown that the consequence relation is a pragmatically determined aspect of the explicitly communicated content of the utterance; in particular, it contributes to the proposition expressed by the utterance. On the relevance view, the proposition expressed by a conjoined utterance in a given context is the result of inferentially/pragmatically enriching the linguistically encoded content of "and". In a similar way, indefinite descriptions may have a univocal linguistic semantics, and thus be semantically unambiguous, but allow, different propositions to be expressed as a result of different ways of enriching this linguistic semantics in particular contexts of use.

2.3. Anaphora

The second type of argument in support of an analysis of indefinite descriptions as semantically ambiguous stems from considerations concerning anaphora. This argument was originally expressed in Strawson (1950, 1952) and is also found in Chastain (1975) and Donnellan (1978).

Consider the following example, adapted from Chastain (1975:210):

- (10) There is *a mosquito* in here. You can hear *it* buzzing. See, *it* just landed on my left arm. Now *it's* biting me. [the speaker swats the mosquito].
Not much left of *it* now, is there!

The argument goes like this: the pronoun "it" is anaphoric on the indefinite description "a mosquito". An anaphoric pronoun can be either a bound variable or a genuine referring expression. Here "it" is not a bound variable. It is rather a referring expression inheriting its reference from the noun phrase in the

antecedent utterance. Now, if "it" inherits its reference from "a mosquito" then the indefinite description must itself be a referring expression.⁴

On Chastain's view, "it" picks out the entity in the world that the indefinite description "a mosquito" also picks out. Donnellan's (1978) version of this argument is slightly different. He uses this example: suppose Woodward and Bernstein say in their description of the investigation of the Watergate break-in:

- (11) We now had a telephone call from *a man* high in the inner circle. *He* asked us to meet *him* at a certain suburban garage where *he* would give us confirmation of some of our conjectures. We later decided to give *the man* the code name "Deep Throat".

According to Donnellan, the truth value of each of the utterances in (11) depends on the properties of the man Woodward and Bernstein "had in mind". So, if it wasn't that man, who they had in mind when uttering the first utterance of (11), that asked them to meet him at the garage, then the second utterance is false; and if it wasn't that man to whom they gave the name "Deep Throat", then the third utterance is false.

These approaches may work for the cases where there is an entity in the world that the speaker intends to refer to or when the speaker does have a particular individual in mind. It is easy, however, to show that they cannot account for all the data. Consider the following examples. The speaker is standing at a badly lit corner of a street when she notices a syringe and utters (12):

- (12) *A drug addict* spent the night here. *He* left a syringe behind

Or suppose that the speaker needs to hire a secretary urgently. She has decided that she will give the job to anyone who applies today. She announces her plans to the rest of the staff by uttering (13):

- (13) *A secretary* will be hired today. *She* will start immediately

(12) and (13) are perfectly well formed and comprehensible. Obviously "he" in (12) and "she" in (13) are anaphoric for their interpretation on the expressions "a drug addict" and "a secretary". But it cannot be claimed, along

⁴The best reconstruction of the argument from anaphora is to be found in Neale (1990:175-176), from which I've drawn heavily in this paragraph.

with Chastain or Donnellan, that the pronouns inherit from the indefinite descriptions reference to the entity in the world that the speaker intends to pick out or the properties of the particular individual that the speaker had in mind, since in the contexts given there is no such entity or individual.

There are two important points to be made about examples like these. First, the argument from anaphora does not provide convincing evidence for the claim that indefinite descriptions are ambiguous, since it is possible for pronouns to be anaphoric on indefinite descriptions which are clearly not referential.⁵ Second, we need to revise our understanding of what pronouns pick up or inherit from the expressions on which they are anaphoric since neither Chastain's nor Donnellan's view seem to make the right predictions.

On this second issue of the way anaphoric relations are to be accounted for, relevance theory offers an entirely different view. On the relevance view, in interpreting an utterance like (12), the hearer will derive partly by decoding and partly by inference the proposition expressed, a truth-evaluable representation of a determinate state of affairs which will contain the representation "a drug addict". In the case where the indefinite description is not used referentially, all the pronoun "he" picks up is the representation set up by the indefinite description. If the indefinite description were used referentially to refer to a particular drug addict, then the representation set up by the indefinite description would involve the representation of that particular individual. In this case the pronoun "he" would pick up this representation.⁶

2.4. Scope constraints

The third argument in support of the view that indefinite descriptions are semantically ambiguous has to do with the behaviour of indefinites with respect to scope. Fodor and Sag (1982) have argued that in order to maintain a unitary Russellian semantics for indefinite descriptions we would have to attribute exceptional "scope island" escaping properties to indefinites. This problem is solved if indefinite descriptions are treated as ambiguous, i.e. if they are assigned a semantically distinct referential sense as well.

⁵The same point is made in King (1988) and Neale (1990).

⁶Adequate mentalistic accounts of anaphora involving definite and indefinite descriptions have been developed (Neale (1990), Heim (1982), Kamp (1984)) within which definite and indefinite descriptions are considered nonambiguous. Within relevance theory anaphoric relations in general have been explored in Kempson (1990) and Wilson (to appear).

Let me take an example to illustrate Fodor and Sag's view. Consider the following:

- (14) A woman in the physics class thinks that every lecturer is after her
(15) Every woman in the physics class thinks that a lecturer is after her

For Fodor and Sag an embedded clause introduced by an attitude verb is one of the linguistic constructions which create scope islands. A scope island is a syntactic constituent which confines the scope of quantifiers to that constituent. So, as expected, there is no reading of (14) in which "every lecturer" takes wide scope over "a woman". But, surprisingly, in (15) the indefinite description "a lecturer" can take wide scope. So, either indefinites are quantifiers which behave exceptionally with respect to scope constraints or they are semantically ambiguous. Fodor and Sag choose the second alternative in order to avoid complicating the principles governing quantifier scope.

King (1988) and Ludlow and Neale (1991) have argued convincingly against this view and all I will do here is recapitulate a few of their arguments. The most important point against this view is made by Kripke (1977) in connection with definite descriptions and is explained in detail with regard to indefinite descriptions in Ludlow and Neale (1991). It is pointed out that the *de re* reading of an utterance like (15), i.e. the reading on which the indefinite description takes the widest scope, does not necessarily coincide with a referential interpretation of the indefinite. It may be that the speaker is talking about a particular individual and intends his hearer to identify this individual (referential interpretation); alternatively, it may be that the speaker does not intend the hearer to identify this lecturer, nor does she intend to talk about a particular lecturer but only about some lecturer or other (attributive reading). This observation severely undermines Fodor and Sag's argument as it shows that the referential interpretation of the indefinite description cannot be defined as the reading of the utterance on which the indefinite description takes the widest possible scope.

In addition to such considerations Ludlow and Neale (1991) point out that the behaviour of the indefinite description "a lecturer" in (15) is not at all exceptional. Similar readings are available for expressions like "several lecturers", "three lecturers" and "some lecturers". Moreover, (14) admits of a reading where "every lecturer" takes wide scope with respect to the verb "think" but narrow scope with respect to the indefinite "a woman". In other

words, the quantifier "every" may also escape the scope island created by the embedded sentence.

King (1988) discusses in detail another "scope island", indicative conditionals. Fodor and Sag claim that in a conditional like (16) the indefinite description may take wide scope with respect to the "if...then" operator whereas the universally quantified expression in (17) cannot:

(16) If a student in the syntax class cheats in the exam, I will be surprised

(17) If every student in the syntax class cheats in the exam, I will be surprised

Fodor and Sag take this to show that the indefinite description in (16) is not a quantified expression but rather a referring term, which "does not participate in the network of scope relations". King, however, argues that there is nothing exceptional about the behaviour of indefinites in this environment: the quantifier "any" can also take wide scope with respect to "if...then", as the following example shows:

(18) If any student in the class comes through that door, I will be surprised

In fact, this is the only reading available for (18). So, King (1988:432) concludes, "No theory which holds that 'each', 'every' and 'any' are all "true" universal quantifiers can have a completely general and exceptionless principle governing the scope of quantifiers with respect to initial 'if' clauses".

In view of such considerations Fodor and Sag's arguments relating to the exceptional behaviour of indefinites with respect to scope islands does not offer convincing evidence for postulating a semantic ambiguity for indefinites.⁷

3. The semantics of indefinite descriptions

I have argued so far that a unitary account of the semantics of indefinite descriptions is preferable. In the last part of this paper I will show how the various uses of indefinite descriptions can be adequately accounted for within a pragmatic theory. Before that, I will present in this section an outline of the

⁷For a more detailed discussion of the related issues see King (1988), Ludlow and Neale (1991) and Enc (1991).

account of the semantics of indefinite descriptions which in my view is the most satisfactory. Needless to say, a full discussion of the complications of the semantics of indefinites lies beyond the scope of this paper.

Until a decade or two ago the most popular theory for the semantics of definite and indefinite descriptions was the one proposed by Russell (1905, 1919). According to Russell, both definite and indefinite descriptions are existentially quantified phrases of the form $\exists x(Fx \ \& \ \forall y(Fy \rightarrow y=x))$ and $\exists xFx$ respectively. On this view, the only difference between definite and indefinite descriptions is that definite descriptions signify a unique entity (when used appropriately).⁸ However, this way of distinguishing between definite and indefinite descriptions seems at best less than exhaustive. Compare the following examples adapted from Chastain (1975:205-206):

- (19) At eleven o'clock that morning, an ARVN officer stood a young prisoner, bound and blindfolded, up against a wall. He asked *the prisoner* several questions. When *the prisoner* failed to answer, he beat him repeatedly. After the beating, *the prisoner* was forced to remain standing against the wall for several hours
- (20) At eleven o'clock that morning, an ARVN officer stood a young prisoner, bound and blindfolded, up against a wall. He asked *a young prisoner* several questions. When *a young prisoner* failed to answer he beat him repeatedly. After the beating, *a young prisoner* was forced to remain standing against the wall for several hours

On the most typical interpretation of (19) the italicised definite noun phrases are understood as in some sense referring back to the indefinite description "a young prisoner" in the first utterance. On the most typical interpretation of (20), on the other hand, the italicised indefinite descriptions can not be understood as referring back to the indefinite description in the first utterance. The speaker is understood to be speaking about a different young prisoner

⁸The uniqueness requirement has often been shown to be too strong. For example, consider,

- (i) The policeman stopped all the cars

where there is no entailment that there is only one x in the universe such that it is a policeman. An overview of the ways in which one can get round the problems of such "incomplete" or "improper" definite descriptions without dropping the Russellian semantics is given in Neale (1991:93-102). See also Recanati (1986).

every time she uses the indefinite description "a young prisoner". In other words, whereas definite descriptions introduce already existing or given or in some sense familiar representations, indefinites can be used only to introduce novel representations (which might then be used as referents for definite descriptions).⁹

There are two points that are worth making in connection with this aspect of the semantics of definite and indefinite descriptions. First, the familiarity - novelty contrast, although linguistically encoded in definite and indefinite descriptions respectively, is not captured by the Russellian analysis. It has, however, been taken as the basic semantic/pragmatic condition which determines the choice between a definite and an indefinite description by other authors in the past like, for example, Christophersen (1939) and Jespersen (1949). Moreover, more recent accounts of the semantics of definites and indefinites, like, for example, the one proposed within File Change Semantics by Heim (1982, 1983) crucially involve the familiarity-novelty requirement.

Second, there is a question whether the familiarity of representation and the novelty of representation associated respectively with definite and indefinite descriptions contributes to the truth conditions of the utterance. In Heim's analysis the novelty/familiarity condition has the status of a "felicity condition": it is not a constraint on the wellformedness of the logical form encoded by the utterance but rather it imposes certain limitations on which readings an utterance admits. Let me illustrate this with respect to indefinite descriptions. Suppose the hearer comes into the secretary's room and the secretary utters (21):

(21) A student left an essay for you

(21) will be true if and only if there is a student such that s/he left an essay for the hearer. It is clear from the way I presented the example that the indefinite description "a student" sets up a representation which is novel in the sense that it has not been established in the previous discourse between

⁹The acceptability of utterances like

(i) The table in my room is broken. I do not think it can be repaired

at the beginning of a conversation when the interlocutors share sufficient contextual information show that the claim that definites introduce representations which are in some sense familiar needs to be refined so as to accommodate contextually salient representations as well. For more on this issue see Heim (1982:370-384). A full account of the semantics of definite descriptions lies outside the scope of this paper.

speaker and hearer. Let's assume now that in (22) below the speaker (inappropriately) uses an indefinite description "a student" to refer to the representation introduced by "the student" in the first utterance:

(22) The student came in this morning. A student left an essay for you

The truth conditions of the second utterance in (22) will be identical to those of (21): the second half of (22) is true if and only if there is a student who left an essay for the hearer. Note, however, that though both parts of (22) are truth evaluable, the sequence in (22) does not have an interpretation on which the indefinite "a student" refers in some sense back to the definite "the student" in the first utterance. Such a reading is prohibited in Heim's framework by the novelty requirement.

However, the novelty requirement is more than just a condition on appropriate usage. In (22), for example, the indefinite description encodes that the representation it introduces is novel and therefore not to be interpreted in connection with the earlier "the student". It thus poses a constraint on the proposition expressed by the utterance. It affects the truth conditions under which the utterance is true by instructing the hearer to set up a representation along the lines of the description without attempting to connect it in any way with previous representations.

Within relevance theory a distinction is drawn between conceptual and procedural information (Sperber and Wilson 1986). Conceptual information is representational information which contributes to the logical form encoded by an utterance, procedural information is computational information concerning the manipulation of logical forms. Wilson and Sperber (1990) argue that certain linguistic expressions, like, for example, pronouns, encode procedural information which contributes to the proposition expressed by the utterance. So, for example, a pronoun like "I" contributes to the truth conditions of an utterance like "I am hungry" by encoding an *instruction* to identify its referent by first identifying the speaker. Within relevance theory one could try to argue that the novelty requirement associated with indefinites is linguistically encoded procedural rather than conceptual information which contributes to the truth conditional content of the utterance. On this view, indefinite descriptions would be, like pronouns, constraints on the proposition expressed by an utterance.¹⁰

¹⁰Alternatively, as D. Wilson suggested to me, it may turn out that only the definite article encodes a procedure, in which case the novelty condition associated with the indefinite article would be the default interpretation. Kempson (forthcoming) suggests that

Whatever the exact theoretical status of the novelty/familiarity conditions, it is not incompatible with the Russellian semantics and could be used to supplement it. There are, however, good arguments for rejecting the Russellian theory as providing the *linguistic semantics* for indefinite descriptions. The most important problem for the Russellian analysis of indefinite descriptions, extensively discussed in Heim (1982) and Kamp (1984), is presented by so-called donkey sentences. For example,

(23) If John buys a donkey, he vaccinates it

The truth conditions of (23) are best given by the formula:

(24) $\forall x(\text{donkey } x \ \& \ \text{John buys } x) \rightarrow \text{John vaccinates } x$

Contrary to the predictions of the Russellian account, the indefinite description is rendered by a universally quantified expression. In fact, the representation of the indefinite as an existentially quantified phrase in this case results in the illformed formula in (25)

(25) $\exists x(\text{donkey } x \ \& \ \text{John buys } x) \rightarrow \text{John vaccinates } x$ ¹¹

On the basis of such considerations Heim and Kamp reject the view of indefinites as introducing existential quantifiers and propose alternatively that they are variable-like elements establishing reference markers or discourse referents. On Heim's analysis, the variable introduced by the indefinite description is bound by a visible or invisible quantifier which is unselective, i.e. a quantifier which can bind more than one variable. In the case of (23) the quantifier would be "always". On Kamp's theory, the universal quantification does not appear in the discourse representation of the utterance but follows from the way in which conditionals are interpreted.

On this view indefinites with existential force are accommodated in a similar way. Consider an utterance like,

definite descriptions encode the instruction that the conceptual representation to be assigned is accessible at no unjustifiable cost.

¹¹Many attempts have been made to save the Russellian account at this point. The most noteworthy is the analysis of pronouns anaphoric on indefinites as going proxy for the corresponding definite descriptions. See Evans (1977) and especially Neale (1990:165-252). None of these proposals seems fully satisfactory to me.

(26) A syntactician gave a talk this afternoon

Both in Discourse Representation Theory and File Change Semantics the existential quantification is not part of the logical form or the discourse representation of an utterance containing an indefinite, so it is not part of the indefinite's lexical/linguistic meaning, but rather built into the truth definition itself. So, for example, in Kamp's theory, (26) is true if there is a mapping from the model of the discourse representation onto an identical array of objects and predicate ascriptions within the model of the real world against which truth evaluation takes place or, in Kamp's terminology, if the model of the representation is "embeddable" in the model of the world. It is important to notice that on the view of indefinites as variable-like entities the truth conditions of an utterance like (26) come out essentially as they do on the Russellian account. The difference between the two approaches focuses on what indefinite descriptions are supposed to encode linguistically, what their lexical meaning is.

I will assume in the remainder of this paper that, with regard to the type of utterances I will be looking at, indefinite descriptions linguistically encode that the representation they set up is novel and that their contribution to the truth conditions is otherwise essentially Russellian. There is no doubt that this position needs to be developed in a more detailed way but for the purposes of this paper this minimal well-justified assumption is sufficient.

4. The pragmatics of indefinite descriptions

In this section I will show how some of the uses of indefinite descriptions can be accounted for on the basis of general communicative principles. A similar position is presented in Ludlow and Neale (1991). Ludlow and Neale also argue that indefinite descriptions have a univocal semantics. In contrast to the position taken in the last section, however, they believe that this semantics is adequately given by the Russellian account. More importantly for the purposes of this paper, Ludlow and Neale place their account within the Gricean framework (Grice 1975) whereas the analysis put forward here is based on relevance theory (Sperber and Wilson 1986). In the discussion that follows the two approaches will be compared and I will argue that relevance theory offers a more adequate account of the way indefinite descriptions contribute to the interpretation of utterances containing them.

4.1. Attributive use

Suppose that the hearer knows that the speaker is attending a series of talks at the department of linguistics. Suppose further that he knows that the speaker does not know any of the speakers personally. Today the speaker decided to skip the talk and the hearer wants to know why. The speaker answers with (27):

(27) A phonetician was giving the talk this afternoon

Given that the speaker is not interested in phonetics, the hearer will conclude that she did not go to the talk because she didn't think it would be of interest to her.

All that a rational speaker, i.e. a speaker who takes into account what the hearer is capable of recovering, may have intended to communicate in this context is that some phonetician was giving the talk the afternoon of the day of the utterance. On the use illustrated by the example in (27), which we will call the quantificational or attributive use of indefinite descriptions, the speaker does not intend to communicate that she is speaking about an individual an individuated representation of whom she has in mind, nor does she expect the hearer to identify the individual she is talking about. She is speaking in a general way about some person who fulfils the descriptive content of the indefinite description; any further specification of this person is irrelevant.

Ludlow and Neale propose the following account for such quantificational uses of indefinite descriptions. In the spirit of Grice they draw a distinction between the proposition expressed (PE) and the proposition(s) meant (PM), i.e. the proposition(s) the speaker intends to communicate. On their account, the proposition expressed (PE) by (27) would be something like "there is an *x*, *x* a phonetician and *x* was giving the talk the afternoon of the day of utterance". In this case the proposition expressed is also intended by the speaker to be communicated, so PE=PM. In addition to the PE and the PM Ludlow and Neale's machinery involves what they call the speaker's ground (SG), i.e. the proposition that is the object of the most relevant belief furnishing the grounds for the utterance. In the case of (27) the speaker's ground would be a general proposition that some phonetician was giving the talk this afternoon. So, the quantificational use of indefinite descriptions is a case where SG=PE=PM. As we will see in the following sections PE, PM and SG do not always coincide, thus providing Ludlow and Neale with a way of identifying and describing each of the uses of indefinite descriptions.

Relevance theory involves a quite different machinery which I will now introduce briefly. Relevance is defined in terms of contextual effects and processing effort. There are three types of contextual effects: a newly acquired assumption may contradict and eliminate an already existing assumption; a newly presented assumption may strengthen an old assumption; and, a new assumption may combine with already existing assumptions to yield new information, what Sperber and Wilson (1986) call "contextual implication". The computation of such contextual effects involves processing effort. Now, on the relevance view of communication, every utterance creates an expectation of its own optimal relevance. Sperber and Wilson (1986) call this the principle of relevance. An utterance is optimally relevant on a given interpretation if and only if (i) it yields an adequate range of effects, enough to be worth the hearer's attention and (ii) it does so without putting the hearer to unjustifiable processing effort in deriving them. The notion of optimal relevance is meant to spell out what the hearer is looking for in terms of effects and effort. But, of course, to be appropriate and comprehensible, an utterance does not have to be optimally relevant. All it has to do is to have an interpretation on which the speaker might rationally have expected it to be so. So, the pragmatic criterion proposed by Sperber and Wilson is the criterion of consistency with the principle of relevance: An utterance on a given interpretation is consistent with the principle of relevance, if and only if the speaker might rationally have expected it to be optimally relevant to the hearer on that interpretation.¹²

The interpretation of (27) on which it expresses the proposition "there is an x, x a phonetician and x was giving the talk on the afternoon of the day of utterance" is consistent with the principle of relevance. A rational speaker could have intended to communicate this proposition since it gives rise to adequate effects without putting the hearer to unjustifiable effort. For example, it indirectly answers the question the speaker has asked and yields further implicatures like, for example, that the work of phoneticians is of no interest to her, that phoneticians are boring speakers, etc. Given that the hearer has accessed an interpretation on which the utterance is consistent with the principle of relevance he will not look for another one. He is entitled to assume that this is the one the speaker intended to communicate since it gives rise to enough effects at the minimal cost. Any other interpretation of the

¹²This theory of communication develops from a theory of human cognition. The basic idea is that cognition is relevance-oriented: humans pay attention to information that seems relevant to them. Every request for attention creates expectations of relevance. Every act of ostensive communication preempts attention and therefore creates expectations of relevance.

utterance on which it might yield more contextual effects will not meet the requirements relating to the effort side and therefore will not satisfy the proposed pragmatic criterion.

On both the essentially Gricean framework that Ludlow and Neale propose and the relevance-theoretic framework the utterance in (27) is taken to have expressed the same proposition. On the relevance view, however, a psychologically plausible explanation can be given of why the proposition expressed is also the proposition meant, to use Ludlow and Neale's terminology. Ludlow and Neale do not address this issue in great detail but their answer seems to be that the speaker could not possibly have meant anything else in this context. This is of course correct but it begs the question. On the relevance view, on the other hand, the criterion of consistency with the principle of relevance predicts that in this context the proposition expressed is among the propositions the speaker intended to communicate.

4.2. Specific use

We will now take a closer look at the uses of indefinite descriptions that have been cited in the literature under the label "referential". Consider the following example from Chastain (1975:212). Suppose that reading the morning paper the speaker comes across the story that Dr. M.DeBakey from Texas stated at a press conference that an artificial heart could be developed within the next five years. The speaker then reports this to the hearer uttering (28):

(28) A doctor from Texas claims that artificial hearts will be developed within five years

Chastain, like most philosophers who have written on the subject, claims that this is a referential use of the indefinite description "a doctor from Texas" because the speaker has a particular individual in mind.

The aim of a pragmatic theory, however, is to provide an account of the way in which utterances are interpreted. In doing this for (28) what is of interest is not whether the speaker has a particular individual in mind but whether she intends to *communicate* that she has a particular individual in mind.

Bearing this point in mind let us consider the various interpretations that (28) may have in different contexts. If it is not manifest to the hearer that the speaker has read a story about a particular doctor in the newspaper, say for example the hearer is not aware that (28) is a report, then all the hearer will

be able to recover (and in these circumstances all a rational speaker should have intended to communicate) is "some doctor (or other) from Texas claims that artificial hearts will be developed within five years". This would be the attributive use discussed in the last section. On the other hand, if it is manifest to the hearer that the speaker is talking about a particular individual, because for example, the hearer knows that the speaker reads the relevant section in the morning paper, the case that Chastain probably had in mind, then all the speaker could have intended to communicate is that "a particular doctor from Texas claims that artificial hearts will be developed within five years". In a slightly different context (28) might communicate something stronger. If, for example, the speaker and the hearer are in a conference and the hearer knows that the speaker has just listened to a talk delivered by the famous Dr. M.DeBakey from Texas, then the hearer will most naturally take (28) to convey that "Dr. M.DeBakey from Texas claims that artificial hearts will be developed within five years".

It follows that from the point of view of the hearer, in addition to the quantificational reading of the indefinite description, (28) has two more interpretations depending on whether the speaker intends the hearer to identify the individual she is talking about. Like Ludlow and Neale (1991), I will distinguish the specific and the referential use of indefinite descriptions. According to Ludlow and Neale (1991:177) "An indefinite description 'an F' is being used referentially in an utterance of 'An F is G' iff (i) the speaker intends to communicate something about a particular individual *b* and (ii) the speaker is using 'an F' intending that his audience shall realise that it is *b* that he intends to communicate something about". The same understanding of referential use with connection to definite descriptions is to be found in Neale (1990) and independently in Rouchota (1992). This use of indefinite descriptions will be discussed in detail in the next section. For the time being I want to concentrate on what has been misleadingly called the "referential" use in the literature and which I will call specific.

What is the specific use of indefinite descriptions? Ludlow and Neale give the following example: the speaker has been informed that Mr Beastly, an auditor from the IRS who visited her last year, is coming to see her today. The speaker "has no reason to expect [the hearer] to know of Mr Beastly, or to know that [the speaker] was audited by the IRS last year" (Ludlow and Neale 1991:181). In this context the speaker utters:

(29) An auditor is coming to see me today

According to Ludlow and Neale, all the speaker intends to communicate, the PM, is the general proposition that some auditor is coming to see the speaker on the day of the utterance (which is also the PE). This is of course all the hearer could possibly recover in this context as well. Yet, Ludlow and Neale call this use specific because "the speaker has singular grounds" for asserting (29), i.e. the speaker has the singular belief that Mr Beastly is coming to see her today. If, however, our aim is to give a psychologically plausible explanation of how the interpretation of (29) takes place, we would be interested in the singular grounds of the speaker just in case they were part of what the speaker intended to communicate. And in this case they are not. It is of course true that our beliefs "furnish", as Ludlow and Neale put it, our utterances but it is not the case that our utterances are functions of our beliefs. So, as in this example, the speaker may hold a belief, the belief about Mr Beastly, which is not communicated by her utterance. Alternatively it may happen that the speaker has a singular belief, for example the belief that Mr Beastly is terrible, but communicates a general belief that all auditors from the IRS are terrible people when she utters (30) using the indefinite generically:

(30) An auditor from the IRS is the worst way to start your day

All this shows is that in providing a psychological explanation of the various uses of indefinite descriptions we are interested in what beliefs the speaker intends to communicate rather than in what beliefs she has in general. In the context given above for (29) all the speaker could have intended to communicate is that "some auditor or other is coming to see her today". I, therefore, conclude that in this example the indefinite description is used attributively.

I propose that the term 'specific' is retained for what Ludlow and Neale call the "strongly" specific use (in contrast to the "weakly" specific use illustrated by (29)). In what follows I will use the term *specific* to refer to cases where uttering a sentence of the form 'an F is G' the speaker intends to communicate that she has a particular individual/object in mind to whom/which she ascribes G but she does not intend the hearer to identify this individual/object (although of course he might). To put it in Ludlow and Neale's terms, when an indefinite description is used specifically the propositions meant include not only the proposition expressed but also the proposition that the speaker has an individuated representation of the individual she is speaking about.

Having identified the specific use of indefinite descriptions and having argued that indefinites are not semantically ambiguous, the next step is to

show how this use can be accounted for in terms of general principles of communication. Consider the following example adapted from Ludlow and Neale (1991:181): Suppose that A and B have been talking about the type of person whose company they frequent. A has been claiming that she likes to get to know the strangest sorts of people. B has explicitly said that he can't believe this since A lives a very conventional life in every other respect. In the middle of this discussion A points to a smashed window and says: "For instance, who do you think smashed that window?". Without waiting for an answer A goes on and utters (31).

(31) A colleague I had coffee with last night did it

As Ludlow and Neale correctly point out, it is difficult to see how a hearer processing this utterance would not infer that the speaker is speaking about a particular individual. So, this is a clear example of an indefinite description used specifically. The question is, what is the status of the communicated assumption that the speaker has a particular individual in mind when she utters "a colleague I had coffee with last night smashed the window".

Ludlow and Neale are not very explicit in their treatment of this example, so I will try to reconstruct their view using their machinery as faithfully as I can. The speaker's grounds (SG) is the singular belief that a particular individual, for example, Mark, smashed the window. The proposition expressed (PE) by the utterance involves the Russellian formulation of the semantics of indefinites. Informally one could present it like this: [an x: x colleague that the speaker had coffee with the night prior to the day of utterance] (x smashed the window). It is not clear to me what Ludlow and Neale think the proposition meant (PM) is in this case, i.e. whether the proposition meant is identical to the proposition expressed or something like "a particular/a certain colleague with whom I (the speaker) had coffee last night smashed the window". My confusion results from the fact that Ludlow and Neale seem to believe that in this example the speaker does not intend to communicate her singular beliefs although she does expect the hearer to realise "upon reflection" that a singular belief furnishes the grounds for her utterance (Ludlow and Neale 1991:181, cf fn 18). For the sake of the argument I will pursue a few of the possible alternatives without attributing any of these to Ludlow and Neale. I am more interested in showing the limitations of their framework.

If the proposition meant is identical to the proposition expressed, then I do not see how within Ludlow and Neale's framework the use of the

indefinite description in (31) differs from the purely quantificational use of indefinite descriptions discussed in section 4.1.¹³ If, on the other hand, one of the propositions meant is that the speaker has an individuated representation of the person who smashed the window, so the speaker has a particular colleague of hers in mind when she utters (31), then given that Ludlow and Neale's framework is Gricean the proposition meant must be a conversational implicature of the utterance. On the Gricean view, if a proposition is conversationally implicated by an utterance, then one should be able to provide an account of how and why it has arisen. According to Grice (1975:31), "A general pattern for the working out of a conversational implicature might be given as follows: "He [the speaker] has said that *p*; there is no reason to suppose that he is not observing the maxims or at least the Cooperative Principle; he could not be doing this unless he thought that *q*; he knows (and knows that I know that he knows) that I can see that the supposition that *q* is required; he has done nothing to stop me thinking that *q*; he intends me to think, or is at least willing to allow me to think, that *q*; and so he has implicated that *q*." Applying this test to check whether the specific interpretation of the indefinite description gives rise to a conversational implicature we get:

- (a) The speaker has expressed the proposition [an *x*:*x* colleague with whom the speaker had coffee the night prior to the day of utterance] (*x* smashed the window).¹⁴
- (b) There is no reason to suppose that the speaker is not observing the maxims or at least the Cooperative Principle.
- (c) The speaker could not be doing that unless she thought that she has a particular colleague in mind.
- (d) The speaker knows that the hearer can see that this supposition is required. On the assumption that the speaker is observing the maxim of relation, she must be attempting to communicate that she has a particular individual in mind.
- (e) The speaker has done nothing to stop the hearer from inferring that she intends to speak of a certain colleague of hers. So the speaker intends the hearer to think that she has a particular individual in mind. So, the

¹³In Ludlow and Neale's framework the two uses would differ with respect to the singular grounds of the speaker, but as I have argued the SG are irrelevant to the interpretation of the utterance.

¹⁴It is not indisputable that "smashed the window", instead of "did it", is part of the proposition expressed. This is not relevant to the purposes of this paper, so, I will leave it aside.

speaker has conversationally implicated that she has a particular colleague in mind.

In my opinion this account is quite unnatural. The best way to see this is to compare this alleged conversational implicature with a clear case of a proposition conversationally implicated by (31). In the context given above for (31) it is clear that what A intends to implicitly communicate by uttering (31) is that she does indeed mix up with people of the strangest sort, like for example, vandals. If we now apply the Gricean test for this conversational implicature, we get:

- (a) The speaker has expressed the proposition [an x:x colleague with whom the speaker had coffee the night prior to the day of utterance] (x smashed the window).
- (b) There is no reason to suppose that the speaker is not observing the maxims or at least the Cooperative Principle.
- (c) Given the context, the speaker could not be doing this unless she intends to communicate that she associates with strange people.
- (d) The speaker knows that the hearer can see that this supposition is required. On the assumption that the speaker observes the maxim of relation she must be intending to communicate something beyond the proposition that some colleague she had coffee with last night smashed the window.
- (e) The speaker has done nothing to stop the hearer from inferring that she intends to communicate that she associates with strange people. So, she intends or is willing to allow the hearer to think that this is what she intended to communicate. So, she has conversationally implicated that she associates with strange people.

Intuitively there is a difference between the alleged implicature "the speaker has a particular colleague in mind" and the conversational implicature "the speaker associates with strange people". The difference seems to be that whereas in this particular context the implicature that the speaker associates with strange people is essential to establish the point of the utterance, the implicature that the speaker has a particular colleague in mind is not.

Compare now the following example, where a definite description seems to have necessarily a specific interpretation. Suppose you ask me why contrary to my habits I took the tube to come to your place and I answer with (32),

- (32) The neighbour told me that the buses are on strike

Suppose the hearer has no means of identifying the speaker's neighbour and the speaker knows this very well and does not expect him to do so. Still the

hearer cannot but interpret the definite description specifically: there is a particular neighbour that the speaker is talking about, the speaker has an individuated representation of the neighbour she is speaking about. Notice, moreover, that in a way similar to (31) the point of uttering (32) does not lie with the implicature that the speaker has a particular individual in mind when she uses the definite description "the neighbour". Rather (32) achieves relevance partially by explaining why the speaker did not take the tube. So, it seems to me that an interesting generalisation would be missed if the two "implicatures" of (31) discussed above were to be analysed in the same way.

Within relevance theory a more plausible account for the specific use of indefinite (and definite) descriptions can be given. The Gricean analysis constructed above hinges on the maxim of relation which is the most underdefined of all the maxims. Relevance theory offers a detailed account of what it means for an utterance to be relevant. Moreover, the relevance theoretic analysis I will propose does account for the intuitive difference in an example like (31) between the implicature associated with the specific use of indefinites and other implicatures of the utterance.

The interpretation process consists of two stages. In the first stage the hearer decodes the utterance. Decoding an utterance results in a semantically incomplete representation, what Sperber and Wilson call the logical form of the utterance, which consists of a string of concepts, namely the concepts encoded by the words in the utterance. In the second stage this linguistically encoded logical form forms the input to a central inferential process as a result of which it is contextually enriched and used to construct a hypothesis about the speaker's communicative intention.

Decoding (31) the hearer gains access to the concepts COLLEAGUE, HAD, COFFEE, WITH, LAST, NIGHT, DID. The indefinite article linguistically encodes that the hearer should set up a novel representation along the lines of the descriptive content of the complex noun phrase "a colleague I had coffee with last night". Each concept in this representation gives access to lexical, logical and encyclopaedic information related to this concept.¹⁵ Some of the encyclopaedic assumptions that these concepts give access to are intended by the speaker to be entertained by the hearer and to form part of the context against which the utterance is intended to be processed. On the relevance view, the construction of the context in which the utterance is intended to be processed is part of the inferential phase of

¹⁵On the relevance view of concepts see Sperber and Wilson (1986:86ff).

utterance interpretation.¹⁶ So, for example, in setting up the concept COLLEAGUE there are certain more or less trivial assumptions that we hold about colleagues and which will become immediately accessible. For example, that colleagues are people that we work with, people that we normally see every day, people that we are able to recognise, people with whom we get on more or less well, and so on and so forth. More importantly for the interpretation of (31), the group of concepts COLLEAGUE THAT THE SPEAKER HAD COFFEE WITH LAST NIGHT will make accessible assumptions associated with the typical scenario of having a coffee with someone. For example, when you have a coffee with someone you know this person, you have seen him, you know his name, you can recognise him, you have a more or less superficial relation with him, etc.

On this view it is easy to explain how the hearer "cannot fail to realise that the speaker has a singular belief concerning some particular colleague" while interpreting (31). The trivial piece of information that the speaker has an individuated representation of the colleague with whom she had coffee last night becomes automatically accessible through the corresponding concepts, in particular through the encyclopaedic assumptions that these concepts activate. This piece of information is part of the "script" or the "encyclopaedic chunk" associated with having coffee with someone.

Notice, however, that the claim that this assumption will be entertained does not mean that it is one of the assumptions which will be crucially involved in establishing the relevance of the utterance. On the relevance view not every assumption made manifest by an utterance is communicated with the same strength. Some implicatures are stronger, others are weaker. To show this I will consider the derivation of the contextual implication that the speaker associates with strange people discussed above.

In the context given above for (31) the hearer will process the piece of new information given in (31), repeated below for ease of exposition, against the background general knowledge assumption in (33) to derive the contextual implication in (34):

- (31) A colleague the speaker had coffee with last night smashed the window
- (33) People who have coffee with colleagues who smash windows, are people who associate with strange people
- (34) The speaker is a person who associates with strange people

¹⁶On the relevance view of the context of an utterance see Sperber and Wilson (1986: 132-142).

The contextual implication in (34) may then achieve relevance further by, for example, contradicting and eliminating the hearer's belief that the speaker does not mix up with strange people. Remember that in the context described earlier the speaker wanted to persuade the unconvinced hearer that she does mix with strange people. Further contextual effects of the utterance may be that the hearer does not trust the speaker any more, that he decides to avoid her, etc.

This shows that the derivation of the contextual implication in (34) is essential in deriving that interpretation of (31) on which the utterance is in accordance with the criterion of consistency with the principle of relevance. This implicature is therefore strongly communicated. The same cannot be said for the assumption, which the hearer cannot help but derive, that the speaker has an individuated representation of the colleague who smashed the window. This is a weakly communicated implicature which contributes to the interpretation process by setting up part of the context (however trivial this part may be).

Are we to conclude from the discussion so far that the implicature associated with the specific reading of an indefinite description never contributes to the relevance of the utterance in a crucial way? The answer is no. Consider the following example from Fodor and Sag (1982): Suppose that the speaker is about to return some tests she has just marked. Suppose further that the speaker has been told that a student in this class, Henry, cheated. Before she hands back the papers the speaker utters (35),

(35) A student in this class cheated in the examination

The speaker addresses herself to all the students in the class and she does not intend them to identify the individual who cheated (although of course Henry will understand that the speaker knows that he cheated). What the speaker intends to communicate in this context is that she knows who cheated.

Ludlow and Neale (1991:181, fn18), comparing (31) and (35), say the following about (35): "Once again we have a case involving a strongly specific use of an indefinite, but in addition it is part of my communicative intention to convey that I have singular grounds for my assertion. It would seem then that specificity is a graded phenomenon, increasing in strength as information about speaker grounds is made available". There are two points I want to make with regard to this comment. First, as I argued earlier, if the speaker in (31) does not intend to communicate that she has a particular individual in mind then the indefinite description should not count as being used specifically. But this would clearly be counterintuitive as there is no other way of interpreting the indefinite description in (31). Second, that "specificity seems to be a

graded phenomenon" is simply the result of the role that the implicature associated with the specific use of an indefinite plays in the interpretation process. Sometimes the assumption that the speaker has a particular individual in mind is weakly implicated and contributes to the overall relevance of the utterance only indirectly by forming part of the context against which the utterance is to be interpreted. This is what happens in (31). Sometimes, however, the assumption that the speaker has a particular individual in mind makes a crucial contribution to the way the utterance is interpreted. And this is what happens in (35).

The interpretation of (35) in the given context may go along the following lines: The speaker is saying that some student in this class cheated in the examination. If someone cheats in the exam, the speaker could have found out by comparing the tests that the students handed in or she might have been told by someone. Since the speaker is saying that a student in this class cheated in the exam, there is reason to believe that the speaker knows, and intends the hearer to infer that she knows, who this student is. On this interpretation the assumption that "the speaker has a particular individual in mind" is inferentially derived from the interaction of the proposition expressed by the utterance and background assumptions about when people say certain things. Is this interpretation consistent with the principle of relevance? Yes, it is one that the speaker might have expected to give rise to enough effects to be worth the hearer's attention. For example, if the speaker has a particular individual in mind in uttering (35), she is warning everyone that when students cheat she can find out, that therefore they should not try to cheat, that she may not take the issue further now but if it happens again there will be a penalty and so on and so forth. So, this interpretation is consistent with the first clause of the definition of optimal relevance. Moreover, these effects are derived without putting the hearer to unjustifiable effort. So, this interpretation satisfies the second clause of the definition of optimal relevance as well. It follows that this is the interpretation the hearer should derive.

4.3. Referential use

Consider now the following examples taken from Ludlow and Neale (1991:177). Suppose that the speaker and the hearer are sitting by a window overlooking the hearer's garden. The speaker looks out of the window, sees a man uprooting the hearer's turnips and utters (36):

(36) Look! A man is uprooting your turnips

Suppose now that the speaker and the hearer are attending a function and they notice Jones whom they both know to be a convicted embezzler. Seeing Jones flirting with the hearer's sister the speaker utters (37):

(37) A convicted embezzler is flirting with your sister

Ludlow and Neale correctly point out that in these examples the indefinite description is used referentially: the speaker intends to communicate something about a particular individual, the man who is uprooting the turnips in (36) and Jones in (37), and she intends the hearer to identify this individual.

Ludlow and Neale do not present a detailed pragmatic account of such examples but the little that they say can be reconstructed in the following way. In both of these examples the speaker's ground is a singular proposition: "that man is uprooting your turnips" in the case of (36) and "Jones is flirting with your sister" in (37). In both cases the proposition expressed is a general proposition which involves the Russellian formulation of the semantics of indefinite descriptions. So, for (36) $\{ \text{an } x: x \text{ man} \} (x \text{ is uprooting your turnips})$ and for (37) $\{ \text{an } x: x \text{ convicted embezzler} \} (x \text{ is flirting with your sister})$. The proposition meant in each case, i.e. the proposition the speaker intends to communicate, is a singular proposition. Uttering (36) the speaker intends to communicate something like "that man/the man we can both see is uprooting your turnips"; uttering (37) the speaker intends to communicate "Jones is flirting with your sister".

The first question that the Ludlow and Neale approach raises is whether the proposition expressed by (36) and (37) is communicated as well or not. I will start my discussion with (37). Suppose that in the same context the speaker utters (38) below instead of (37):

(38) Jones is flirting with your sister

Intuitively it is, I think, clear that replacing the indefinite description with the name of the referent affects the import of the utterance. (37) draws the hearer's attention to the fact that the referent is a convicted embezzler and relies on his inferential abilities to pick out the intended referent. Uttering (38), on the other hand, the speaker refers to the particular individual she intends to speak about in a more straightforward way but does not directly focus the hearer's attention on the fact that Jones is a convicted embezzler. This suggests that the descriptive content of the indefinite description "a convicted embezzler" contributes to the interpretation of the utterance and

therefore that the proposition expressed by (37) is among the "propositions meant" by this utterance.

Given that the speaker could choose between (37) and (38), any pragmatic theory which aims to give a psychologically plausible explanation of how utterances are interpreted should face the question why the speaker chose (37). Within relevance theory this is not difficult to answer. Let us assume that the indefinite description "a convicted embezzler" in this particular context secures reference to Jones and let us think for a moment on which interpretation (37) would be consistent with the principle of relevance. When processed against background assumptions like those in (39) and (40), (37) could yield the contextual implication in (41):

- (39) Convicted embezzlers are untrustworthy people
- (40) If an untrustworthy person is flirting with your sister, we must warn her to be careful with him
- (41) We must warn your sister to be careful with Jones

The question is how the background assumptions in (39) and (40) come to bear on the interpretation of the utterance. Well, this is how the indefinite description "a convicted embezzler" influences the interpretation of the utterance. Decoding this phrase the hearer gains access to the group of concepts CONVICTED, EMBEZZLER, which makes immediately accessible general encyclopaedic assumptions about convicted embezzlers, like for example, that they are untrustworthy, that they are dishonest, that they are dangerous and cunning, that it is better not to have relationships with them, etc. Such assumptions about convicted embezzlers combine with background assumptions about, for example, the hearer being protective towards his sister to yield implicatures like the one in (41). On this interpretation, which in this context is the first to come to mind, (37) achieves enough contextual effects for no unjustifiable effort and could therefore be taken as the one the speaker intended. For example, in addition to (41) the speaker may be implicating that the hearer's sister is not as clever as she thought she was. So, the particular indefinite description that the speaker chose to utter contributes to the overall interpretation of the utterance by giving access to part of the context in which the hearer is expected to interpret the utterance.

Of course the same contextual implication, that the hearer's sister should be warned, could have been communicated by (38). Since the hearer knows that Jones is a convicted embezzler he is very likely to access this assumption. The difference is that in uttering (37) the speaker provides the hearer with a clear indication about the context against which her utterance should be

processed, thus putting the hearer to less processing effort in constructing the intended context. It follows that the descriptive content of an indefinite description used referentially not only helps the hearer to pick out the intended referent but also helps the hearer build up the context in which the speaker intends her utterance to be interpreted and thus give rise to contextual effects which a different way of referring would not have achieved as economically.

Such considerations explain how the descriptive content of the indefinite description in (37) contributes to the interpretation of the utterance. What about the descriptive content of the indefinite description in (36) repeated below? Does it contribute in any way to the information conveyed by the utterance?

(36) Look! A man is uprooting your turnips

According to Wilson (to appear) reference assignment involves the retrieval or construction of an appropriate conceptual representation, one that uniquely identifies the referent. Clearly, the indefinite descriptions "a man" in (36) and "a convicted embezzler" in (37) are at least partially intended as a means of enabling the hearer to understand who the person the speaker intends to talk about is. Although as I argued above the indefinite "a convicted embezzler" also affects the derivation of contextual effects, the indefinite "a man" does not seem to have such a role in the given context. In this case the role of the indefinite description seems to be simply to help the hearer to establish the intended referent. It is in this way that these indefinite descriptions contribute to the interpretation of the utterances that contain them. The choice of an indefinite description when its role is solely to secure the intended reference is again driven by considerations of optimal relevance. Among all the possible ways of drawing the hearer's attention to a particular individual the speaker will use the one which she thinks will make the hearer identify the referent most easily. This does not seem to be fulfilled by the indefinite "a man" but one should bear in mind that speakers will use the most relevant stimulus available to them in the circumstances of the utterance. So, a speaker may even use a description as shallow as "a man" and succeed in securing reference if additional contextual factors, like, for example, in this case visual perception, help the hearer to identify the referent uniquely.¹⁷

The second question with regard to Ludlow and Neale's analysis is what is the status of the proposition "Jones is flirting with your sister". Within a

¹⁷Similar considerations apply to referential uses of definite descriptions. See Rouchota (1992).

Gricean framework like that of Ludlow and Neale this proposition would most probably come out as a conversational implicature. Applying Neale's (1991:89) analysis for referential uses of definite descriptions to this example we get:

- (a) The speaker has expressed the proposition [an $x:x$ convicted embezzler](x is flirting with your sister)
- (b) There is no reason to suppose that the speaker is not observing the CP and maxims.
- (c) The speaker could not be doing so unless she thought that Jones is flirting with my sister. On the assumption that the speaker is observing the maxim of relation, she must be attempting to convey something beyond the general proposition that some convicted embezzler is flirting with my sister. On the assumption that the speaker is adhering to the maxim of Quality, she must have adequate evidence for thinking that a convicted embezzler is flirting with my sister. The hearer knows that the speaker knows that Jones is flirting with my sister.
- (d) The speaker knows (and knows that I know that she knows) that I know that Jones is a convicted embezzler, that I know that the speaker knows that Jones is a convicted embezzler and that I can see that the speaker thinks the supposition that she thinks that "Jones is flirting with my sister" is required.
- (e) The speaker has done nothing to stop me thinking that Jones is flirting with my sister.
- (f) The speaker intends me to think that Jones is flirting with my sister.
- (g) The speaker has implicated that Jones is flirting with my sister.

The whole analysis crucially hinges on the maxim of relation which, as mentioned already, is the least well defined and understood of all the maxims. A more detailed and comprehensible account can be given within relevance theory.

On the relevance view, decoding the indefinite description in (37) involves setting up a new representation constrained by the concepts CONVICTED and EMBEZZLER. According to the context given above for (37), the hearer knows that Jones is a convicted embezzler. So, gaining access to the concepts CONVICTED and EMBEZZLER, he is likely to retrieve the assumption that Jones is a convicted embezzler. The concept Jones itself must be easily accessible to the hearer since, according to the context, he has noticed that Jones is at the party. So, he may construct the hypothesis that the speaker intends to communicate something about Jones, namely that Jones is flirting with his sister. On this view the proposition "Jones is flirting with your sister" is a contextual implication inferentially derived from the interaction

between the proposition expressed by the utterance, "a convicted embezzler is flirting with your sister", and the already existing assumption that Jones is a convicted embezzler. This hypothesis about the intended interpretation of (37) is clearly the easiest one to construct in this context. Moreover, it gives rise to a wide range of effects which make it worth the hearer's attention. For example, it may yield the contextual implication that the hearer's sister should be warned, it may strengthen the hearer's prior belief that Jones takes advantage of women who fall for his charms, it may contradict and eliminate the hearer's belief that his sister never talks to strangers and so on and so forth. Since on this interpretation the utterance in (37) yields enough contextual effects without putting the hearer to unjustified effort, this is the interpretation the hearer will recover. Any other interpretation of (37) which might give rise to more contextual effects will require more processing effort and therefore will not be adequate on the effort side of the definition of optimal relevance.

Suppose now that in the context given above for (37) the speaker had uttered (42) instead of (37):

(42) The convicted embezzler is flirting with your sister

In this context the definite description "the convicted embezzler" is used referentially. According to Recanati (1989a) and Rouchota (1992), the speaker explicitly communicates that Jones is flirting with the hearer's sister. What is of interest to me here is that, although they both communicate the proposition Jones is flirting with your sister, (37) and (42) have a different impact when uttered in this context. Notice that when (37) is uttered in this context it has more of the flavour of a joke than (42). Consider also (43)

(43) I am going to see a very clever student now

uttered in a situation where both speaker and hearer know that the speaker is going to see Robert whom they both think to be a fool (and each one knows that the other one thinks so). And compare (43) to (44) which is still ironical like (43) but less humorous than (43):

(44) I am going to see the very clever student now

This can be explained on the basis of certain assumptions about the semantics of definite and indefinite descriptions backed with an adequate theory of pragmatics like relevance theory. As was said in section 3, definites

linguistically encode that the representation they set up is in some sense familiar; indefinites, on the other hand, linguistically encode that the representation they set up is novel. Notice now that both in the scenario given for (37) and in the scenario given for (43) the semantics of the indefinite description involved is in some sort of conflict with the context of the utterance. The indefinite description in each case encodes that the hearer should build up a novel representation of a convicted embezzler in (37) and of "a clever student" in (43). But it is mutually manifest in the context in which these utterances are uttered that there is a prior instance of a convicted embezzler or of a clever student. Considerations of optimal relevance, moreover, indicate that the speaker intends to speak about that individual. So, why didn't the speaker use the definite description which would have indicated that the intended representation of a convicted embezzler already exists, thus cutting down processing costs? Precisely because the speaker also intended to make the hearer smile at her utterance. In terms of relevance, the speaker is putting the hearer in some extra processing effort fooling him as it were into setting up a novel representation of a convicted embezzler or a clever student only to find out when deriving the singular proposition implicated that a representation of the person the speaker intends to talk about was already accessible. This extra effort, however, is rewarded by giving rise to extra effects, i.e. the humorous flavour of (37) and (43).

5. Indefinites, definites and explicit content

Within the Gricean theory of communication there is only one possible way of accounting for the proposition "Jones is flirting with your sister": it can only be part of what is implicated by the utterance. According to Grice, what is said by an utterance is derived by linguistic decoding, reference assignment (which includes temporal reference as well) and disambiguation. Everything else communicated by an utterance contributes to what is implicated by that utterance. Now, notice that although the derivation of the proposition "Jones is flirting with your sister" involves fixing in some sense a referent for the indefinite description "a convicted embezzler", indefinite descriptions are not referring expressions and therefore "Jones" could not be part of what is said.¹⁸

¹⁸Grice (1969) argues in connection with referential uses of definite descriptions that definite descriptions are not semantically ambiguous and that their referential reading should be accounted for as part of what is meant rather than what is said by the utterance. See also

It has been argued, however, that pragmatically determined aspects of utterance meaning contribute not only to what is implicitly communicated by an utterance but also to what an utterance communicates explicitly (Sperber and Wilson 1986, Carston 1988, Recanati 1989b). According to Sperber and Wilson (1986:188), the motivation for this claim comes from examples like,

(45) It will take some time to repair your watch

After linguistic decoding, disambiguation and reference assignment have taken place (45) expresses a semantically complete proposition. The proposition expressed by (45) however is a truism. On the basis of relevance oriented assumptions the speaker is expected to have intended to say something beyond this truism. Of course the exact proposition expressed by (45) depends on the context in which it is uttered. In general, however, when uttering such a sentence the speaker intends to say that repairing your watch will take longer than it normally takes. So, the temporal specification encoded by the linguistic expression "some time" is inferentially enriched or strengthened to the point where the proposition expressed is the one intended by the speaker. So, the proposition expressed by an utterance is not just the result of linguistic decoding, reference assignment and disambiguation but it also involves inferential enrichments of this sort.

On the relevance view a pragmatically determined aspect of utterance interpretation may be either an implicature or an explicature of the utterance. According to Sperber and Wilson (1986:182), an assumption communicated by an utterance U is explicit if and only if it is a development of a logical form encoded by U. Now, since the derivation of the assumption Jones is flirting with your sister involves in some sense fixing a referent for the indefinite "a convicted embezzler" and reference assignment contributes to the explicitly communicated content of an utterance, the question arises whether the proposition "Jones is flirting with your sister" is an explicature or an implicature.

This question is especially worth considering since it has been argued with respect to the referential use of definite descriptions that the communicated singular proposition is an explicature of the utterance rather than an implicature (Recanati 1989a, Rouchota 1992). So, for example, suppose that (46), repeated below, is uttered by a sports reporter commenting on McEnroe's behaviour during his last game:

- (46) The notoriously moody tennis player gave signs of his bad temper when he threw his racquet at his opponent's head

In this context the proposition expressed by (46) is something like (47):

- (47) The notoriously moody tennis player, John McEnroe, gave signs of his bad temper when he threw his racquet at his opponent's head¹⁹

To justify the implicature analysis I proposed in the last section for the referential use of indefinites, it would be nice to show that (37) does not explicitly express the proposition "A convicted embezzler, Jones, is flirting with the hearer's sister".²⁰

Recanati (1989b) proposes two criteria for distinguishing between explicitly and implicitly communicated aspects of utterance meaning. He suggests that any decision concerning what is said and what is implicated must be consistent with our pretheoretic intuitions on the matter. He calls this the Availability principle. In the case of (36) and (37) most peoples' intuition is, I think, that what the speaker *said* was that some man (or other) is uprooting the hearer's turnips and that some convicted embezzler (or other) is flirting with the hearer's sister. What she communicated, on the other hand, is that a particular man, the man both speaker and hearer can see, is uprooting the turnips and that Jones is flirting with the hearer's sister. In my opinion this intuition is strengthened by another one, that if the speaker wished to explicitly refer to Jones and draw simultaneously the hearer's attention to the fact that Jones is a convicted embezzler, then she would have uttered "the convicted embezzler is flirting with your sister". However, these intuitions are not shared by everyone. People like Chastain (see section 2.2) think that utterances with referentially used indefinite descriptions are true if the predicate is true of the intended referent. So, an utterance like (37) will be true if and only if Jones is flirting with the hearer's sister. So the availability principle is not of much help in this case.

The second criterion that Recanati (1989b) discusses is the Scope principle, according to which, genuine conversational implicatures cannot fall within the scope of logical operators. One way of applying this principle is in

¹⁹According to Recanati (1989) the proposition expressed is simply "J. McEnroe gave signs of his bad temper when he threw his racquet at his opponent's head".

²⁰The proposition expressed by (37) could not be simply "Jones is flirting with your sister" since what the speaker intended to say in the context given for (37) will be true if and only if Jones is flirting with the hearer's sister and he is a convicted embezzler.

the way of Cohen (1971). Cohen (1971) argued that the temporal connotation often carried by a conjunction is not a genuine conversational implicature by showing that the result of embedding a conjunction and its reversed counterpart under the scope of a conditional is not a contradictory sentence. So, "If the old king died from a heart attack and a republic was declared Sam will be happy, but if a republic was declared and the old king died of a heart attack Sam will be unhappy". Trying to do something similar with indefinite descriptions we get: If a convicted embezzler is flirting with your sister, then we should warn her but if a convicted embezzler is flirting with your sister then we should not warn her". This conjunction of conditionals forms a contradictory utterance which suggests that the information that Jones is flirting with your sister is not part of the explicitly communicated content of (37).²¹

On the basis of the criteria that are at the moment available for distinguishing between explicitly and implicitly communicated aspects of utterance meaning, the proposition "Jones is flirting with your sister" comes out as an implicature of (37).

The motivation for treating the referential use of definite descriptions as contributing to the proposition explicitly expressed by the utterance has to do with truth conditional considerations (Rouchota 1992, Recanati 1989a)²². What the speaker has said by (46) using the definite description referentially is felt to be true if and only if J.McEnroe gave signs of his bad temper when he threw his racquet at his opponent's head. This was first pointed out by Donnellan (1966). It is, however, a fact that intuitions about the truth conditions of utterances with referentially used definite descriptions are quite fuzzy as well. And, therefore, every analysis that is based solely on such intuitions is not adequate. On the other hand, it is also a fact that definite descriptions are much more susceptible to referential uses than indefinite descriptions. In my view, before abandoning or endorsing the explicature analysis for referential uses of definite description one should think carefully about the nature of reference and the semantics of definites and indefinites. Reference, on its most simple understanding, involves picking out a uniquely identified individual or object. Picking out a referent presupposes two things:it

²¹Notice that if you were presented with this conjunction of conditionals in normal everyday conversation you would try to make sense of it by constructing the hypothesis that the second "a convicted embezzler" sets up a new discourse referent. This is as expected since indefinites linguistically encode that they introduce novel entities in the discourse.

²²Recanati (1989) tries to build a second argument based on considerations of economy but I do not find it convincing.

must exist and it must be somehow accessible. The semantics of both definite and indefinite descriptions fulfill the requirement of existence. But it is the semantics of definite descriptions which involves familiarity and uniqueness that seems to fit better the prerequisites for referring. My hunch is that research in this direction may show that the semantics of definite descriptions is such that it allows them to be inferentially enriched into proper referring expressions in a suitable context and thus contribute to the proposition expressed, whereas the semantics of indefinite descriptions does not allow such an enrichment.

References

- Carston, R. (1988). Explicature, implicature and truth theoretic semantics. In Kempson, R. (ed) *Mental representations: the interface between language and reality*. Cambridge: Cambridge University Press 155-181.
- Carston, R. (forthcoming). Conjunction and pragmatic effects. In *The Encyclopaedia of Language and Linguistics*, Pergamon Press and the Aberdeen University Press.
- Chastain, C. (1975). Reference and context. In Gunderson, K. (ed) *Language, Mind and Knowledge*. Minnesota Studies in the Philosophy of Science, 7. University of Minnesota Press, Minneapolis 194-269.
- Christophersen, P. (1939). *The articles: A study of their theory and use in English*, Copenhagen.
- Cohen, L.J. (1971). The logical particles of natural language. In Y. Bar-Hillel (ed) *Pragmatics of Natural Language*. Dordrecht: Reidel.
- Donnellan, K. (1966). Reference and definite descriptions. *The Philosophical Review* 75, 281-304.
- Donnellan, K. (1978). Speaker reference, descriptions and anaphora. In Cole, P. (ed) *Syntax and Semantics* 9:47-68. Academic Press: New York.
- Enc, M. (1991). The semantics of specificity. *Linguistic Inquiry* 22:1, 1-25.
- Evans, G. (1977). Pronouns, quantifiers and relative clauses. *Canadian Journal of Philosophy* 7:467-536.
- Fodor, J.D. and Sag, I. (1982). Referential and quantificational indefinites. *Linguistics and Philosophy* 5: 355-398.
- Grice, H.P. (1969). Vacuous names. In Davidson, D and Hintikka, J. (eds) *Words and Objections: essays on the work of W.V. Quine*. Dordrecht: Reidel Publishing Company 118-145.
- Grice, H.P. (1975). Logic and Conversation. In Cole, P. and Morgan, J. (eds) *Syntax and Semantics, vol 3, Speech Acts*. New York: Academic Press.

- Heim, I. (1982). *The Semantics of Definite and Indefinite Noun Phrases*. PhD thesis. Graduate School of the University of Massachusetts.
- Heim, I. (1983). File change semantics and the familiarity theory of definiteness. In Bauerle, R., C. Schwarze and A. von Stechow (eds) *Meaning, Use and Interpretation of Language*. Berlin: de Gruyter.
- Kamp, H. (1984). A theory of truth and semantic representation. In Groenendijk, J., T.M.V. Janssen and M. Stokhof (eds) *Truth, Interpretation and Information*. Foris: Dordrecht-Holland.1-42.
- Kempson, R. (forthcoming). *Language and cognition: licensing grammar*. To be published by Blackwell, Oxford.
- Kempson, R. (1990). Anaphora: a unitary account. In *Proceedings of the Portugal Linguistics Association Meeting*, October 1990.
- King, J.C. (1988). Are indefinite descriptions ambiguous? *Philosophical studies* 53: 417-440
- Kripke, S (1977). Speaker's reference and semantic reference. In French, P. A., T. E. Uehling and H.K. Wettstein (eds) *Contemporary Perspectives in the Philosophy of Language*. Minneapolis: University of Minnesota Press, 6-27.
- Ludlow, P. and Neale, S. (1991). Indefinite descriptions: In defense of Russell. *Linguistics and Philosophy* 14: 171-202.
- Neale, S. (1990). *Descriptions*. Cambridge, Mass.: MIT Press.
- Recanati, F. (1986). Contextual dependence and definite descriptions. *Proceedings of the Aristotelian Society* 1986. 57-73.
- Recanati, F. (1989a). Referential/attribution: a contextualist proposal. In *Philosophical Studies* 56:217-249.
- Recanati, F. (1989b) The pragmatics of what is said. *Mind and Language* 4:295-329.
- Rouchota, V. (to appear). On the referential/attribution distinction. In *Lingua* 87 (1992).
- Sainsbury, R.M. (1979). *Russell*. London:Routledge and KeganPaul.
- Sperber, D. and Wilson, D. (1986). *Relevance: communication and cognition*. Oxford: B. Blackwell.
- Stich, S. (1986). Are belief predicates systematically ambiguous? In Bogdan, R.J. (ed.) *Belief*. Clarendon Press: Oxford. 119-147.
- Strawson, P. F. (1950). On referring. *Mind* 59: 320-344.
- Strawson, P. F. (1952). *Introduction to Logical Theory*. London: Methuen
- Wilson, D. (1991). Semantic theory. Lecture notes. UCL
- Wilson, D. (to appear). Reference and relevance. In Munch, B. and Posner, R. (eds) *Proceedings of the International Semiotics Conference on Reference*.

- Wilson, D. and Sperber, D. (1990). Linguistic form and relevance. In J. Harris (ed) *UCL Working Papers in Linguistics* 2: 95-112.
- Wilson, G. (1978). On definite and indefinite descriptions. *The Philosophical Review* 87: 48-76.