Direct Reference and Specificity Workshop
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Folk Ideas About Reference and Specific Indefinites

(Extended Handout)

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Introduction

Informal discourse about specific indefinites often employs ideas such as 'the individual the speaker had in mind'. Although this kind of discourse most often seems to proceed coherently, many semanticists are sceptical about theoretical or formal accounts employing these notions.

In this paper, we argue that folk ideas about reference are central to semantics, figuring in the truth conditions of some specifically used indefinites.

We adapt some proposals found in Perry (2001) to clarify what these ideas might be.

We further argue that while discourse containing specific indefinites may make reference to speaker's referents, the indefinite forms themselves are never directly referential, rather they are attributive. Moreover, the speaker's referent never figures directly in any of the communicated propositions (unlike with definites). Thus these specific indefinites are 'attributive' - in any sense of that term.

Finally, we aim to provide a taxonomy of specific indefinites by assuming only an analysis of indefinites as existential quantified noun phrases (QNPs), and by assuming other independently motivated mechanisms such as contextual restriction of quantifier domains.

1. The Usual Suspects

(1) A man walked in the park. He whistled.

(2) a. If an uncle of John's dies, John will be rich.
b. Every linguist has studied every analysis that has been proposed for some problem.

(3) Hob thinks a witch killed John's cow and Nob thinks she killed Mary's pig.

(4) a. A certain friend of Mary's is in the garden
b. There is a certain friend of Mary's in the garden

2. Walking and Whistling

Russell-Kripke Account of Descriptions (According to Neale 1990):

> Descriptions are general, quantificational expressions. Any appearance to the contrary results from a failure to distinguish between the semantics of the descriptions themselves and aspects of interpretation which attend the use of the expression in context.

Stalnaker's (1998) account of (1) (according to Breheny 2001, 2002) :

(5) Proposition literally expressed by first sentence:

$\exists x[man(x) \wedge walk\_in\_the\_park(x)]$

Proposition pragmatically communicated partly as a result of accommodating presuppositions of the second sentence:

$\exists x[sp\text{-}ref(x) \wedge man(x) \wedge walk\_in\_the\_park(x)]$

{where *sp-ref* expresses a property which necessarily is uniquely instantiated if at all}

(Diagonal) proposition expressed by the second sentence:

$\exists x[sp\text{-}ref(x) \wedge whistled(x)]$

The proposition which represents the Geachean truth-conditions of the corresponding DRS $\exists x[man(x) \wedge walk(x) \wedge whistle(x)]$ is implied by a combination of what is literally said and what is indirectly communicated.

(6) a. John is politically naive and is introduced by a practical joking host to a tabloid journalist as a cabinet minister and at the same time to a real cabinet minister as a journalist. In the ensuing (sincere) conversation, the real cabinet minister comes across as pro-Europe while the fake minister comes across as anti-Europe.

b. Last night I met a member of the Cabinet. He was anti-Europe.

While it would be appropriate for us to respond with (7)a below, we clearly could not respond with (7)b or c. So while it is clear that John is unwittingly misleading us into thinking that he met a member of the Cabinet who was anti-Europe - nothing he actually says can be denied.

(7) a. He wasn't a member of the Cabinet.

b. You didn't meet a member of the Cabinet last night.

c. He wasn't anti-Europe.

When we are in a context where there is no speaker's referent, we get a sometimes unexpected uniqueness effect attending the use of a singular anaphoric pronoun:

(8) a. I predict that a woman will be nominated for President in 2004. I also predict she will win.

b. I predict a woman will finish in the top fifty in this year's marathon. But I predict she won't win it.

(9) A student might fail the exam. He might then complain to the Dean.

(10) It is ludicrous to pretend that there has never been an accident on this autobahn. We both witnessed it, remember?

(11) A: If you'd ever witnessed a high-speed autobahn accident, you wouldn't oppose the introduction of a speed limit.
B: I drive every day on autobahns, so, in fact, I have witnessed a high-speed autobahn accident. But I still think that one should be allowed to drive as fast as one wants.

(12) B: I drive every day on autobahns, so, in fact, I have witnessed a high-speed autobahn accident. It was fatal. But I still think that one should be allowed to drive as fast as one wants.

Note that these non-specific, uniqueness implying cases can have specific non-uniqueness counterparts. But this is not a scope thing. We can show that this kind of specificity and scope are independent. In both examples below, the indefinite has wide scope over negation but we different kinds of reading in each case:

(13) John: Why is Surgeon Smith being investigated by the Medical Board?
Mary: He didn't follow the proper procedure when operating on a woman patient and now she is suing the hospital. (Geachean - there could be a number of patients he didn't follow procedure on).

(14) John: If you ever fail to follow procedure on a patient then you deserve to be fired.
Mary: I have not followed procedure on a patient in the past. But she would have died if I had. (uniqueness implication - just one patient Mary failed to follow procedure on).

Where an indefinite is used specifically as in (1), we have available both the speaker's referent and the intersective set for anaphoric reference:

(15) a. At the Seattle demonstration, I saw a riot policeman crack a protester's skull for absolutely no reason. They all seemed to be under orders to club people at will.
b. At the Seattle demonstration, I saw a riot policeman crack a protester's skull for absolutely no reason. They should have been prosecuted for doing that.

(16) At the Seattle demonstration, I saw a riot policeman crack a protestor's skull. He just did it for no reason! They seemed to be under orders to club people at will./They should have been prosecuted for that.

So, speaker's referents are involved in obtaining a Geachean reading for discourses as in (1). But note that, according to both Stalnaker's 2-D account and the E-type account, there is no pragmatically communicated singular proposition involving the speaker's referent directly.

Donnellen cases (According to Kripke): The intuition is supposed to be that in some cases, not only does the truth of 'The F Gs' depend on the individual that fits the description G-ing, but that individual itself figures in the truth conditions of the statement made.

(17) a. The man drinking a martini is a spy
b. Proposition literally expressed:
$\exists x[man\_drinking\_martini(x) \wedge C(x) \wedge \forall y[man\_drinking\_martini(y) \wedge C(y) \rightarrow y = x] \wedge spy(x)$ {*C* expresses some contextually specified property}
c. Proposition pragmatically communicated:
spy(**a**) {where **a** is a directly referential, singular term referring to the speaker's referent}

That second sentence of (1) expresses the proposition that the speaker's referent whistled is a result of either diagonalisation (according to Stalnaker) or through the recovery of the E-type description in the context.

What is exploited by the E-type process is an attributive proposition about the speaker's grounds, what is salient is an identifying property, what is accessible is an identifying condition. One reason to think this comes when we embed (1) in an attitude report:

(18) John thinks that a man walked in the park and that he whistled.

Here there is a Geachean reading for the embedded clauses (no uniqueness implication) but also it can be de dicto. So at least in this kind of case, the interpretation of (1) is constructed without the benefit of some pragmatically supplied singular proposition.

3. Exceptional Scope and Truth-conditional Intrusion

3.1 'A certain' Indefinites

The truth conditions of the first statement in (1) do not make reference to the speaker's referent. I.e. it would not be false if the speaker's referent was not a man who walked in the park, so long as one man did. By contrast, the truth of the examples in (4) depend on whether whoever the speaker has in mind is in the garden (and a friend of Mary).

Does this mean that 'a certain' indefinites and certain other specific indefinites are directly referential as Fodor & Sag (1982) and Kratzer (1998) might suggest?

We'll consider here Kratzer's referential account as it does better at accounting for the exceptional scope the exceptional scope cases in (2):

(2) a. If an uncle of John's dies, John will be rich.
b. Every linguist has studied every analysis that has been proposed for some problem.

Kratzer (1998) argues for a formal ambiguity account of indefinites whereby they are

sometimes existential QNPs and sometimes complexes combining variables over skolemised partial choice functions and their syntactic arguments.

In particular, the proposal is that the relevant construal of (2) be analysed as in (19)

(19) Every linguist has studied [every analysis that has been proposed for [$some_{f,x}$ problem]]

Here $some_{f,x}$ is a complex expression consisting of a variable, *f*, over skolemised choice functions (functions from individuals to partial choice functions) and its argument - also a variable, *x*. The function variable has its value fixed by context. The individual variable is bound in this case, although it's value can also be fixed by context - as with (2)a above.

Kratzer also claims that indefinites containing 'a certain' are unambiguously referential. So (20)a is analysed along the lines of (20)b where both function variable and individual variable are assigned a value by context :

(20) a. A certain man walked in the park.
b. WiP(f(x,man))

Kratzer's proposal for (20) shares some problems with Hintikka's (1986) alternative according to which 'a certain'-noun phrases are existential but they always take scope ('have priority') over epistemic operators. There seem to be cases where this will not work. Consider that (21) seems perfectly coherent and sensible with an intermediate scope reading:

(21) I doubt that John thinks his boss prefers a certain type of hors d'oeuvre. Otherwise he wouldn't have prepared twenty different varieties.

(21) represents two problems in one for Kratzer. The first, noted in Chierchia (2001), is that in negative contexts, specific indefinites have a non-specific, intermediate scope reading. This is illustrated in (22)a,b both of which can be understood according to the gloss in (22)c.:

(22) a. It's not the case that if an uncle of John dies, John will be rich
b. It's not the case that if a certain uncle of John dies, John will be rich
c. $\neg\exists x$ [uncle_of_john(x) $\wedge$ (die(x) $\rightarrow$ rich(j))]

We shall suggest a way out of Chierchia's problem below. The second, independent problem, is that these specific indefinites need to be, in some sense, attributive. This can be illustrated with (23) which has an intermediate scope reading:

(23) It might be that John thinks his boss prefers a certain type of hors d'oeuvre. So he might prepare just one type.

To overcome this problem, Kratzer could suppose that 'a certain' indefinites are composed not of a variable over skolemised choice functions but something like a variable over functions from indices to such functions. The proposal then could be that when the index is dependent on the modal operator in (23), the intermediate scope reading is obtained; when dependent on 'thinks', a narrow scope construal would be obtained according to which it may be that John thinks only that there is some particular type of hors d'oeuvre that his boss

favours. On this construal, the follow up sentence above is pragmatically odd. Better would be (24):

(24) So he might try to find out what that type is.

In fact, as discussed below, there are up to 9 construals of (23), corresponding to the product of the three possible scopes for the indefinite and the three possible epistemic states which 'certain' can be linked to. This multiplicity of readings points to further, conceptual problems with Kratzer's account. If we consider again our intuitions about the truth conditions of (20)a, we find that truth turns on how things are with the speaker's referent. Although Kratzer suggests that where the individual variable is free, then it is assigned to the speaker and the function is assigned a value so that it chooses the speaker's referent. But this is entirely ad hoc, it does not follow at all from (20)b since context could assign any value to *f* and *x*.

Kratzer also suggests that where the individual variable is bound, then the sentence is infelicitous unless there could be some 'natural' function relating individuals in the binding domain and the individuals chosen by the choice function - implying that in the bound cases, the idea of a speaker's referent does not enter into it. But the 'natural function' generalisation is incorrect, and we would argue that the idea of the speaker's referent always figures in the interpretation.

(25) a. Every one of these young men hopes to marry a certain woman.
b. {*Said by an anti-theoretical psychiatrist like RD Laing*} I don't think much of Freud and his type but I do admit that most problems my patients have stem from a certain childhood experience.

So Kratzer's proposal does not fully capture the meaning of 'a certain' indefinites. And, in as far as other indefinites should be treated in the same way, then their analysis is also incomplete.

Although we agree that the exceptional scope indefinites should be treated along the lines of 'a certain' indefinites, we would propose that 'a certain' indefinites are just existential QNPs and that 'certain' is just a predicate restricting the quantification:

(26) The semantic rule for $certain_u$ makes reference to the utterance, u, of the noun phrase in which it is contained and says that $certain_u$ expresses the property represented by the **identifying idea**, i_u, involved in the representation of the speaker's ground for this utterance.

3.2 Networks of Notions

Perry (2001):

Notions:	Mental particulars representing individuals
Ideas:	Mental particulars representing properties these individuals have.
Identifying Ideas:	Ideas which represent identifying properties (i.e. properties which necessarily are uniquely instantiated if at all).

Files Ideas are associated with notions in files.

Files result from what Perry calls the 'detach and recognise game' whereby buffers containing notions of, and associated ideas about, individuals are retained beyond perceptions of that individual.

Notions are born of perceptions - either of individuals or of acts of referring.
Intersubjective notion networks build up through communication.
Although Plato's notion of Socrates is borne of his perceptions of Socrates, Perry's notion of Socrates is born of perceptions of texts Plato wrote containing references to Socrates.
There are a variety of ways in which notion networks can end not with an individual but what Perry calls a 'block'. This can be through misperceptions (of individuals or utterances) and a variety of other means (including the free creation of notions).

One condition on a functioning file is that it contain at least one identifying idea. Sometimes the only identifying ideas for a file are obtained through being told something like, "A whale washed up on this beach last month". If we say that a notion borne of a direct perception is a **zeroth-order notion network**, then in that case one identifying idea will be of whatever stands at the end of the notion network in which the speaker's notion of the individual introduced is embedded. We can assume that notion networks are the most typical grounds for making existential claims where the speaker has a particular individual in mind. So we can assume that *sp-ref* in (5) above represents this condition.

One difference between (1) and (20)a then lies in the indirectness the predicate 'certain' introduces into the discourse. If one says, 'A certain man walked in the park' then one forestalls the more natural way of thinking about the speakers referent (via the condition, 'whatever stands at the end of that notion network') and assumes that the speaker is drawing your attention to a particular identifying property she/he has in mind. This squares with intuition. If one says, 'A certain man walked in the park' when one just has the individual in mind under no particular description other than as whatever stands at the end of the network to which my current notion attaches, then one is being slightly misleading, or at best, overly pedantic in one's speech.

We can find motivation for the proposal that notions, ideas etc do play a role in semantics (other than in the semantics for 'a certain') by considering some problems with current accounts of Hob-Nob examples.

3.3 Hob-Nob Motivation

It is well known that Hob-Nob examples (as in (27)) carry implications about how Hob and Nob think about the witch in question without the speaker or audience believing in witches, without Hob and Nob having ever met and without them thinking of the witch in the ways described in the other attribution (as the killer of Mary's pig or John's cow respectively).

(27) Hob thinks a witch killed John's cow and Nob thinks she killed Mary's pig.

That is, even with sceptical conversants, an utterance of (27) implies that there is an identifying property such that in Hob's epistemic alternatives the non-existent witch has it and in Nob's epistemic alternatives his non-existent witch has it. Neale (1990), assuming a

kind of pragmatic E-type account, suggests that the identifying property in question could be something like *being the local witch*.

(28) a. bel(Hob, ∃x[the_local_witch(x) ∧ KJ'sC(x)]) ∧ bel(Nob, ∃x[the_local_witch(x) ∧ KM'sP(x)])
b. ∃α[bel(Hob, witch(α) ∧ KJ'sC(α)) ∧ bel(Nob, KM'sP(α))] {α is type <s,e>}

Van Rooy's (1997) analysis implies just that there is such a property (known to the speaker). But neither of these suggestions are quite right. To see this, consider the scenario where Hob comes upon John's cow mysteriously dead and he has certain beliefs about mysterious bovine deaths which lead him to conclude that only a witch could have caused the death. Hob also believes that at any one time, there can be at most one witch operating in his area, A. Thus he forms the belief that there is a unique witch in area A and this witch killed John's cow. At the same time, Nob goes through the same kind of process upon his discovery of Mary's pig dead. That is, Nob comes to believe that there is a unique witch in area A which caused the death of this pig. Hob knows nothing of Nob and Mary's pig while Nob knows nothing of Hob or John's cow. Moreover, there has been no public discussion of any sort of mysterious deaths or of witches. We could describe this scenario using (29):

(29) Hob believes that there is a unique witch in area A who is such that she killed John's cow. Nob believes that there is a unique witch in area A who is such that she killed Mary's pig.

However, we could not describe this scenario using the Hob-Nob sentence, (27). What is missing from our scenario, it seems, is some kind of link between Hob's imaginary witch and Nob's imaginary witch which is more than a shared identifying property. For instance, if we add to the above scenario that both Hob and Nob see and believe a tv news report about an active witch then we could acceptably report on the scenario using the Hob-Nob sentence. It seems that what is being imputed by Hob-Nob sentences with sceptical conversants is that there is a notion network through which both Hob and Nob could identify their respective imaginary witches. I.e., there is a notion network, NN, which is such that, (under some mode of presentation) Hob believes that the individual standing at the end of NN is the witch that killed John's cow and (under some mode of presentation) Nob believes the individual standing at the end of NN is the witch that killed Mary's pig.

(30) ∃y [NN(y) ∧ bel(Hob, ∃x[witch(x) ∧ KJ'sC(x) ∧ end_of(x,y)]) ∧ bel(Nob, ∃x[KM'sP(x) ∧ end_of(x,y)])]
{∀x,y,z □ end_of(x,z) ∧ end_of(y,z) → x=y}

We shall not be pursuing a full analysis of intentional identity statements in this paper. The above example, if it's analysis is on the right track, is just meant to independently motivate the idea that notions, ideas and so on do play a role in our ordinary intuitions about meaning.

3.4 Pragmatic Presuppositions

The rule suggested in (26) represents the minimal meaning of 'certain'. Often, a speaker will use these indefinites and mean to convey more than this minimal meaning. This is illustrated in the jokey (31) where it is presupposed Sue and Bill know who John left with:

(31) {*John and Mary are having an affair which they believe is secret. But, two of their office-mates, Bill and Sue, have together found out about this 'secret' affair.*}
Bill (to Sue): I hear that John left the staff party with a certain female colleague last night.

Sometimes, a speaker will imply that their grounds are only deferential. In (32) below, the mother is implying that she has in mind the girl Bill has in mind. In our terms, the mother is suggesting that the identifying idea she has is of whatever (composite) identifying idea was guiding Bill's actions as he prepared to leave:

(32) {John and Mary are discussing their teenage son, Bill, as he leaves for school}
Mary: Did you notice how carefully Bill got ready for school. I expect he wants to impress a certain girl in his class.

The variety of readings of (23) above come about in a similar manner: The speaker's identifying idea could be of whatever John's, or John's boss's, is of. So, when the scope of the indefinite is intermediate between 'might' and 'thinks', the follow-up sentence in (23) suggests a construal where it is the type John has in mind. But if it were construed so that it is the type the boss has in mind, then we could appropriately follow up with (33):

(33) a. $\Diamond\ \exists x[\text{certain}_u(x) \wedge \text{type\_of\_h\_d'o}(x) \wedge \text{bel}(j, \text{prefer}(j'\text{sb}, x))]$
b. So, he might prepare just one type (john)
c. So, if he makes that type, he might impress his boss after all (john's boss)
d. But I'll have to look up the recipe books to see if it exists. (speaker)

There is also a (marginal) construal with the same scope but with simply the speaker's referent. This could be followed up with (34):

(34) a. $\Diamond\ \text{bel}(j, \exists x[\text{certain}_u(x) \wedge \text{type\_of\_h\_d'o}(x) \wedge \text{prefer}(j'\text{sb}, x)])$
b. So, he might prepare just that type. (john)
c. So, he might try to find out what that type is. (j's boss)
d. But if he does, he is deluded.

(35) a. $\exists x[\text{certain}_u(x) \wedge \text{type\_of\_h\_d'o}(x) \wedge \Diamond\ \text{bel}(j, \text{prefer}(j'\text{sb}, x))]$
b. But he keeps it's recipe a secret (john)
c. So, if he makes that type, he will impress his boss after all (j's boss)
d. But if he does, he would be wrong (speaker)

3.5 Implicitly Specific Indefinites

The example in (2)a would be treated by supposing that the quantificational indefinite noun

phrase is implicitly restricted with *certain*$_u$, as suggested by (36):

(36) $\exists x[\text{certain}_u(x) \wedge \text{uncle\_of\_john}(x) \wedge \text{die}(x)] \rightarrow \text{rich}(j)$

Regarding Chierchia's problem with negative contexts, we can give a general solution to this which exploits the idea that speakers can implicate (or rather, presuppose) more about their grounds than suggested by the minimal meaning of the sentence. In general, Chierchia's problem arises where a specific indefinite, *some F*, is contained within the scope of some operator, *[O...some F...]*, and where this whole complex is in some negative or DE environment:

(37) [neg..[O..some F...]].

In (22)a,b above, the indefinite is embedded in a conditional inside negation. In that case, we can assume that the speaker is globally presupposing something extra about the kind of uncle she has in mind. In order to get the 'non-specific' reading glossed in (22)c, the presupposition would be along the lines of the necessary condition in (38):

(38) $\forall x \Box\text{certain}_u(x) \rightarrow (\exists y[\text{uncle\_of\_john}(y) \wedge (\text{die}(y) \rightarrow \text{rich}(j))] \rightarrow (\text{die}(x) \rightarrow \text{rich}(j)))$

In general, if $\phi(x)$ is the result of extracting *some F* from *[O...some F...]*, then the presupposition for the 'non-specific' intermediate construal in negative contexts is suggested by :

(39) $\forall x \Box\text{certain}_u(x) \rightarrow (\exists y[Fy \wedge \phi(y)] \rightarrow \phi(x))$
{$\phi(x)$ is the result of extracting *some F* from *[O...some F...]*}

3.6 Implicitly Bound Unarticulated Constituents

Returning now to the proposal in (26), we should note that it is only appropriate for uses of 'a certain' in examples like (2)a where there is no implicit bound dependency. Something more needs to be said about cases like (2)b.

(2) a. If an uncle of John's dies, John will be rich.
b. Every linguist has studied every analysis that has been proposed for some problem.

In contrast to Kratzer's proposal, I will not posit a covert variable in the form of 'a certain' to be bound or assigned away by context. Rather, I would advocate a general lexicalist treatment of this kind of binding dependency. This treatment is set out in Breheny(1999, 2003) and is based on ideas of Jacobson's (1995) variable-free semantics. The details of that treatment are not all that relevant here, suffice to say that the possibility that 'certain' is interpreted as dependent on a C-commanding quantifier stems from lexical coercion (as in a something like a generative lexicon framework). As far as sentence-level logical semantics is concerned, we can think of (2)b requiring the same kind of contextual restriction as for case like in (40)a

which in an appropriate context, can be understood according to the gloss in (40)b:

(40) a. Every bad boy broke every bottle
b. Every bad boy in the group broke every bottle he was given

I.e. what is important for (2)b is simply that we can motivate an analysis of the noun phrase *[some problem]* in general such that it is understood as:

$\lambda y \lambda P.\exists x[problem(x) \wedge R(y)(x) \wedge P(x)]$

where *R* is fixed through some contextual process.

Note that an alternative wording for (2)a which could have the same interpretation as the one in question would be:

(41) Every linguist has studied every analysis that has been proposed for a certain problem.

Although Breheny (2003) offers a more elegant way of accounting for this example involving lexical coercion, for our purposes, we will simply say that 'certain' is simply ambiguous between the meaning characterised in (26) above and that characterised for $certain^2$ in (42) below:

(42) The semantic rule for $certain^2_u$ makes reference to the utterance, u, of the noun phrase in which it is contained and expresses the relation which holds between members of the binding domain, y and individuals x such that x is the individual which instantiates the identifying property represented by the identifying idea $i_{u,y}$ which the speaker associates with y in her grounds for the utterance.

As with (2)a, we assume that indefinites that do not contain 'certain' can be understood as containing an unarticulated constituent. So the proposed interpretation for (2)b is given in

(43) $\forall x[linguist(x) \rightarrow \forall y[analysis(y) \wedge \exists z[certain^2_u(x)(z) \wedge problem(z) \wedge proposed\_for(z)(y)] \rightarrow studied(y)(x)]]$

This says that every linguist has given the once-over to the problem which the speaker associates with that linguist. This is the intermediate scope reading.

Negative contexts are also not a problem here given that we can always come up with a suitable preuspposition. Again, we note that (44)a can have a 'non-specific' intermediate scope reading, glossed in (44)b. The presupposition required in this case is given in (45):

(44) a. Not every linguist has studied every analysis that has been proposed for some problem
b. $\neg\forall x[linguist(x) \rightarrow \exists z[problem(z) \wedge \forall y[analysis(y) \wedge proposed\_for(z)(y) \rightarrow studied(y)(x)]]]$
c. $\neg\forall x[linguist(x) \rightarrow \forall y[analysis(y) \wedge \exists z[certain_u(x)(z) \wedge problem(z) \wedge$

proposed_for(z)(y)] → studied(y)(x)]]

(45) $\forall x,y \Box certain^2_u(x)(y) \rightarrow ((\exists z[problem(z) \wedge \forall w[analysis(w) \wedge proposed\_for(z)(w) \rightarrow studied(w)(x)]]) \rightarrow (\forall v[analysis(v) \wedge proposed\_for(y)(v) \rightarrow studied(v)(x)]))$

This says: If y is what is associated in the speaker's mind with x, then if x has given any problems the once-over, x will have given y the once-over.

There has also been some discussion of apparent non-specific intermediate scope readings where non-monotonic determiners are involved. Apparently the discussion of these cases appeared in an early draft of Chierchia's paper but was removed later. (Thanks to Phillipe Schlenker for drawing my attention to these.) An example is given below:

(46) Exactly two linguists have studied every analysis that has been proposed for some problem

The problem for the non-monotonic cases, as I understand it, was that the singleton indefinite solution could be such that only Linguists A and B could have studied every analysis of problem type X (say, exceptional scope indefinites), but Linguist C could have studied every analysis of type Y problems (say, donkey pronouns) - but on the 'intermediate scope' construal there is an implication that at most two linguists gave the once over to problems of any type. To get things, right, we can say that the speaker has in mind the problem which is the first problem that is given the once-over. I.e. something like the following is presupposed:

(47) Necessarily, x is what the speaker associates in her mind with y, iff x was the first problem y studied every analysis of.

I think that works out ok for the 'exactly' cases, the 'most' cases and so on.

4 Pragmatic Issues

In this section, we will take up some issues which our treatment of specifics raises.

It is being proposed that the exceptional scope of (48)a is accounted for according to (48)b where the contextually supplied restriction is an identifying property.

(48) a. When an uncle of John's dies, John will become an earl.
b. $\exists x[certain_u(x) \wedge uncle\_of\_john(x)] \rightarrow become\_earl(john)$

In as far as such 'token-reflexive' contextually supplied restrictions are possible for noun phrases in general, our first issue concerns the question: Why are definite descriptions not also allowed to be restricted by the same kind of property?

For instance, in a situation where there are two tables covered with books and the speaker utters (49)a (infelicitously), why can we not obtain a contextual restriction as in (49)b?

(49) a. The table is covered with books
b. $\exists x[\text{certain}_u(x) \wedge \text{table}(x) \wedge \text{covered\_with\_books}(x)]$

We could suppose that the answer to this lies in the conventional presuppositional properties of definites - say, definites conventionally presuppose that the audience could identify a suitable restriction *independently* of the utterance of the definite. But this is not right as a consideration of bridging illustrates:

(50) When John checked the picnic supplies he found that the cake was squashed.

A better explanation might come from considering the practices of English speakers with regards *indefinites*. Let us assume it is pragmatically presupposed that indefinites are normally used in assertive contexts to introduce individuals where the audience could recover no identifying property *except through a notion network*. Then this presupposition is enough to give rise to infelicity of (49) in as far as the use of a definite to do that job would not be optimal.

The second issue is a follows: If identifying properties are allowed to restrict indefinites, then why are indefinites not used to talk about identifiable entities?

To answer this question, we need to look at the presuppositions for definites. Suppose there is a *conventional* presupposition associated with definites which just says that the audience can recover an identifying property. Then in languages which have the option available to mark descriptions in this way, this option would always be used as it more optimally realises the relevant intention. (viz to make reference to an individual under a recoverable description).

The third issue concerns the fact that in the case of (1) as apposed to(2)a, the truth conditions of the first statement do not involve whoever is the speaker's referent. What happens with (1) is that something like the assumption in (51) is implicated in the process of making an interpretation for the anaphoric pronoun accessible

(51) $\exists x[\text{sg}_u(x) \wedge \text{believe}(\text{speaker}, \text{man}(x) \wedge \text{walk\_in\_park}(x))]$
{sg_u expresses the property of being the individual who stands at the end of the notion network involved in the ground for her utterance of the indefinite u}

Why is this so? Why do we not just have the relevant restriction as part of the proposition expressed (as in (52))?

(52) $\exists x[\text{sg}_u(x) \wedge \text{man}(x) \wedge \text{walk\_in\_park}(x)]$

This can be explained with reference to a generalisation about choosing stronger interpretations:

(53) Where an expression α contains contextual parameters or whose interpretation is otherwise underspecified by its meaning, and where it would be equally plausible and coherent in the context for α to be interpreted as a_1, a_2, ... a_n, then the interpretation which gives rise to the strongest *justifiable* proposition expressed should be chosen.

(Where justification is on the grounds of relevance).

This generalisation is importantly different to the often evoked 'strongest meaning hypothesis' which makes no reference to justification (see Winter 2001). To see that it is the strongest *justifiable* meaning which is selected, consider (54)a,b below. In these examples, the predication is understood as only partial (not maximal) even though there is no reason to do with plausibility, coherence or typicality why the maximal reading should not be attributed to the speaker. There is however, no reason in the context why the maximal should be attributed to the speaker either, since in each case, it is sufficient to know that the predicate applies to only some to satisfy local expectations of relevance:

(54) a. Mary cannot come to work today. Her children are off school.
b. Johnny was naughty at the zoo today. He fed the monkeys chocolate.

In the case of (1), note that whether or not the first sentence is understood as in (52), we have to presuppose that the speaker has specific grounds. That is, we have to presuppose (51). So, the speaker's referent would be made salient/available either way. Given that this is the case, there is no justification in assuming that it is intended that the indefinite has the stronger interpretation since the only purpose of presupposing the speaker has an individual in mind is to provide a referent for the pronoun in the second sentence.

There is one final issue to consider having to do with why if , in the case of (1), the implicature involves a description 'whoever stands at the end of the notion network involved in the ground for the speaker's utterance of the indefinite *u*'

5 Other Accounts

5.1 Choice Function Accounts

See Geurts (2000).

In Addition:
- The problems for referential choice function accounts (a la Kratzer) discussed above.
- 'Free existential closure' accounts face problems to do with cross-over:

(55) Some woman is loved by every man

Chierchia (2001) posits a combination choice function account invoking implicit contextual restriction via the deployment of covert variables in the logical form. Schwarz (2001) posits a kind of ambiguity between a Kratzerian choice function analysis and a free closure account. Both implicitly recognise that at least some cases, a 'singleton' restriction is required for specific indefinites but that this is insufficient for all case, given the negative contexts problem. But, as there is a solution for the negative contexts problem for the singleton indefinites account, having both mechanisms is redundant.

5.2 'Backgrounding'/DRT Accounts (Geurts 2002 i.a.)

(56) a. If an uncle of John's dies, John will be rich.
b. <{x},{uncle_of_J(x), <∅,{<∅, die(x)> → <∅, {rich(j)}>}>}>

Problems:
- Crossover phenomena
- Links specificity to'backgrounding':
  Specific indefinites carry backgrounded information which is marked as new

But there is a problem here because specificity (at least as it is marked by 'a certain') is independent of givenness or 'background'. This is suggested in (4)b:

(4) b. There is a certain friend of Mary's in the garden

What *there*-sentences don't allow are expressions which 'presuppose' or 'take for granted' the existence of what is being quantified over by the noun phrase. This includes indefinites ('Some (of the) Fs') in contexts where the Fs are already presupposed to exist:

(57) a. Mary's neighbour has a herd of goats. Some of those goats are in her garden.
b. Mary's neighbour has a herd of goats. ?? There are some of those goats in her garden.

{Note, definite NPs and NPs with 'most' 'every' and so on, are not so bad if they are 'novel' (and there is no coda!)}:

(58) A: There's no food in the house!
B: What do you mean?! There's the stew I made last night.
B': What do you mean?! There's most of the stew I made last night.
C: Are you kidding?! There are all of the pies I got up at dawn to bake.

It seems clear that the 'a certain' indefinite in (4)b is not backgrounded, so there is a dimension of specificity that the notion of backgrounding fails to capture.

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