

## Folk Ideas About Reference and Specific Indefinites

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

Stalnaker’s (1998) proposal for specific indefinites found in discourses like (1) is similar to Kripke’s proposal about referentially used definite descriptions. For Stalnaker, the first sentence just has a meaning which determines an existential proposition, but at the utterance level, the first sentence introduces a ‘speaker’s referent’ to which reference is subsequently made with the pronoun.

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

There is a difference however in that for the referentially used definite description, the pragmatically introduced proposition is singular, containing the actual speaker’s referent. Stalnaker’s proposal about the indefinite employs diagonalisation which yields the attributive proposition that the individual the speaker has in mind walked in the park. That is, the pragmatically introduced proposition is not singular since in each possibility in Stalnaker’s 2-D context the speaker could have a different individual in mind. This analysis is borne out by the fact that (1) can be embedded in an attitude report, (2), with the same ‘Geachian’ reading but without any accompanying *de re* reading:

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

So-called exceptional scope indefinites of the kind in (3) have independently received a lot of attention because they seem to take scope where no NP-movement is possible:

- (3) 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. Kratzer also claims that indefinites containing ‘a certain’ are unambiguously referential. So (4)a is analysed along the lines of (4)b where both function variable and individual variable are assigned a value by context :

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

There is some motivation for this in that, unlike the first sentence in (1), the truth of (4)a depends on whether the speaker’s referent was a man who walked in the park. Also, in as far as specific indefinites without ‘a certain’ can have the same analysis, we obtain the wide scope and intermediate scope effects in (3) without NP movement.

Kratzer’s proposal for (4) 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 (5) seems perfectly coherent and sensible with an intermediate scope reading:

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

(5) 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 (6)a,b both of which can be understood according to the gloss in (6)c.:

- (6) 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.  $\neg\exists x [\text{uncle\_of\_john}(x) \wedge (\text{die}(x) \rightarrow \text{rich}(j))]$

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 (7) which has an intermediate scope reading:

- (7) 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 (7), 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, "So he might try to find out what that type is."

In fact, as discussed below, there are up to 12 construals of (7), corresponding to the product of the four 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 (4)a, we find that truth turns on how things are with the speaker's referent. This does not follow at all from (4)b since context could assign any value to  $f$  and  $x$ . But, we would argue, context never assigns any other kind of value to the function. So Kratzer's proposal does not fully capture the meaning of 'a certain' indefinites.

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:

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

The idea of *identifying ideas* comes from Perry (2001) which posits mental particulars (**notions**) representing individuals. **Ideas** are mental particulars which represent properties these individuals have. **Identifying ideas** are ideas which represent identifying properties (i.e. properties which necessarily are uniquely instantiated if at all). 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, "I met an interesting woman last night". In that case one identifying idea will be of whoever stands at the end of the notion network in which the speaker's notion of the individual introduced is embedded. This latter point highlights a feature of Perry's proposal: that something like notions, (identifying) ideas and notion networks figure in our folk semantics. One can assume (with Perry and this author) that these folk ideas are underpinned by the fact that there really are such mental particulars which carry information (or, at least, content) about objects and properties. However, independently of that issue, 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.

It is well known that Hob-Nob examples (as in (9)) 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).

(9) 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 (9) 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*. 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 (10):

(10) 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, (9). 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.

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.

The rule suggested in (8) 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 (11) where it is presupposed Sue and Bill know who John left with:

(11) {*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 (12) below, the mother is implying that she has in mind the girl Bill has in mind:

(12) {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 (7) 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 (7) 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, "So, he might impress his boss after all". There is also a (marginal) construal with the same scope but with simply the speaker's referent. This could be followed up with, "But I'll have to look up the recipe books to see if it exists".

The example in (3)a would be treated by supposing that the quantificational indefinite noun phrase is implicitly restricted with *certain<sub>u</sub>*, as suggested by (13):

$$(13) \quad \exists x[\text{certain}_u(x) \wedge \text{uncle\_of\_john}(x) \wedge \text{die}(x)] \rightarrow \text{rich}(j)$$

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,  $[neg.[O...some F...]]$ . In (6)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 (6)c, the presupposition would be along the lines of the necessary condition in (14):

$$(14) \quad \forall x \square \text{certain}_u(x) \rightarrow (\exists y[\text{uncle\_of\_john}(y) \wedge (\text{die}(y) \rightarrow \text{rich}(j))] \rightarrow (\text{die}(x) \rightarrow \text{rich}(j)))$$

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 (15):

$$(15) \quad \forall x \square \text{certain}_u(x) \rightarrow (\exists y[Fy \wedge \phi(y)] \rightarrow \phi(x))$$

We will also show how to extend the analysis to cater for the 'bound into' readings of these specific indefinites (as in (3)b). This will simply exploit mechanisms necessary to account for the reading of (16) below such that the object noun phrase is understood as 'every bottle he was given':

$$(16) \quad \text{Every bad boy broke every bottle}$$

Finally, we will suggest why, in exceptional scope cases, identifying properties actually restrict quantification (and therefore figure in truth conditions) but in other cases, (1), they merely figure in indirectly introduced information. This has to do with the fact that, in the latter cases, the same conversational purpose (introducing the speaker's referent for subsequent anaphoric reference) would be served without enriching the content of what is said. By the maxim which says to be no more informative in what you say than is required for the conversational purpose, there are no grounds for assuming the speaker is saying anything stronger than the minimal proposition.

To sum up, we have seen that the interpretation of specific indefinites quite plausibly involves identifying properties instantiated by a speaker's referent (or possible referent). The link can either be through an *identifying idea* (in the case of 'a certain' or exceptional scope indefinites) or *notion networks* (in Hob-Nob cases and probably also (1)). Some specific indefinites introduce this property as part of the truth conditions ('a certain' and exceptional scope indefinites and Hob-Nob cases) while others indirectly, (1). 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.

References:

**Chierchia** (2001) 'A puzzle about indefinites' in Cecchetto (ed) *Semantic Interfaces*; **Hintikka** (1986) 'The semantics of a certain' *LI*; **Kratzer** (1998) 'Scope or pseudo-scope...' in *Rothstein (ed) Events and Grammar*; **Neale** (1990) *Descriptions* MIT Press; **Perry** (2001) *Reference & Reflexivity* CSLI; **van Rooy** (1997) PhD Diss.; **Stalnaker** (1998) 'On the representation of context' *JoLLI*;