QUESTIONS OF REFERENCE IN WRITTEN NARRATIVES

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1 Introduction

/1/ Strether's first question, when he reached the hotel, was about his friend; yet on his learning that Waymarsh was apparently not to arrive till evening he was not wholly disconcerted.

This is the beginning of a novel. Suppose this is the only thing we know about the text. We also know English, have some general knowledge of the world, and have some idea as to what a novel is. How will the text be understood? After very little deliberation we will come up with a hypothesis such as:

- /2/ Allowing for the fact that this is to be just a novel, the author wants us to believe that
 - a. a man (or a boy) who, according to the author, is called Strether [probably by his second name], reached a hotel (the author believes that we are familiar with the man and the hotel);
 - b. immediately after reaching the hotel the man asked a question of somebody [perhaps the receptionist];
 - c. the question was about a friend of the man (and the author believes that we know whom he as in mind);
 - d. the man learned from somebody [probably from the person of whom he asked the question, and through an answer to his question] that another man (or boy), called Waymarsh, was apparently [as seemed likely to Strether on the basis of what he learned] not to

arrive till evening [till the evening of the day of Strether's own arrival] (the author again believes that we are familiar with the person called Waymarsh [who very likely is to be the same person as Strether's friend]);

e. the man called Strether was not wholly disconcerted by the fact that the man called Waymarsh [his friend] was apparently not to arrive till evening.

Understanding the text along these lines will be almost instantaneous with an experienced reader even if he starts reading *The Ambassadors* by Henry James for the first time in his life. Ease of understanding is deceptive, though, when we try to establish how understanding is achieved.

In the present paper I will be concerned with one particular aspect of this problem: the correct understanding of referential expressions in /l/, generally, of referential expressions in written narratives. The qualification "written" is used as a mark of caution; I am analysing an example from a printed text and wish to leave it undecided to what extent my results carry over to arbitrary narratives.

Questions of reference have been a standard topic in text linguistics ever since its inception, as any introductory text to the field will show. At the same time reference has proved one of the most recalcitrant problems in generative grammar both from a syntactic and a semantic point of view; recent developments such as 'trace theory' seem to be partly motivated by the continuing struggle with 'anaphora' and 'coreference'.

In this paper I cannot even begin to review the extensive literature on questions of reference in linguistics, the theory of literature, the philosophy of language, experimental psychology, and artificial intelligence research. Even so it should be safe to claim that the understanding of reference in real life situations, including the interpretation of literary texts, remains ill-understood. Using

the beginning of *The Ambassadors* as a sample text, I will study some of the general considerations that a reader may have to apply for correctly understanding referential expressions in a written narrative. I will concentrate on two problems: reference and fictionality, and reference and the narrator.

Naturally, *some* theoretical framework is needed. I shall here adopt the proposals made in Lieb (1979), (1980a) for the semantics of referential expressions and for sentence meanings in general.

2. Reference, fictionality, and the narrator

2.1. General approach

Consider, once again, hypothesis /2/. The initial proviso, "allowing for the fact that this is to be just a novel", is meant to take care of fictionality: James does not really want us to believe that ...; rather, he pretends that he wants us to believe that ... I shall not here be concerned with the problem of precisely how "pretends" is to be understood (but see fn. 8, below). Nor will I elaborate on "wants us to believe". It should be kept in mind, though, that all of /2a/ to /2e/ is the content of a reader-oriented propositional attitude that the author pretends to have. Only the type of attitude ("want - believe") has been indicated. The account of the attitude may certainly be improved.

As it stands, hypothesis /2/ does not allow for a narrator different from the author. A narrator (or a series of narrators) can be accommodated in such cases by the following modification:

/3/ The author pretends that there is a person who ... and who is the author of [the given text] and who wants us to believe that ... The dots after "who" indicate the properties with which the author explicitly or implicitly endows the narrator. Note that the modification must follow the fictionality requirement and precede the specification of the basic propositional attitude, which is pretended (by the author) to be an attitude of the narrator: the author pretends that there is a person who ... and who wants us to believe that ... (where all references to the author in /2/ are replaced by references to the narrator). The modification can be extended, in an obvious way, to cover a whole series of narrators.

For a more precise account we informally characterize a number of auxiliary notions.

2.2. Auxiliary concepts

First, consider the word sequence of text /2/ (of the text quoted in /1/), i.e. the sequence of English words used in the text such that sequential order mirrors left--to-right arrangement in /1/:

/4/ The word sequence of /Î/ = Strether's first question when he reached the hotel was about his last friend yet 13 on 14 his 15 learning that 17 waymarsh was 19 apparently 20 not 21 to 22 arrive 23 till 24 evening 25 he 26 was 27 not 28 wholly 29 disconcerted 30.

The word sequence is abstract, a sequence of English words. 1 The text /1/ - the text quoted in /1/ - also contains a concrete realization, say, the corresponding part of the original copy of *The Ambassadors* as produced by Henry James. 2

We define a referential expression of a text as any part of the word sequence of the text such that reference conditions are associated with the part. For instance, Strether's 1 may be taken as a referential expression of text /1/. As part of a reference condition associated with

Strether's, we may assume:

/5/ There is exactly one x such that the speaker is referring by Strether's, to x.

Strether's 1 is a referential expression independently of whether any associated reference condition is actually satisfied with respect to Henry James. Referential expressions in the sense defined can be identified solely on the basis of the syntax and the semantics of the text as determined by 'English grammar'.

As soon as the speaker is identified with Henry James, the ficitionality proviso must also cover the reference conditions associated with referential expressions. Thus, hypothesis /2/ should be modified to read:

/6/ Henry James pretends that

- there is exactly one x such that he is referring by Strether's₁ to x, and that he believes that we are familiar with any x to which he is referring by Strether's₁ and ...;

and [Henry James pretends] that he wants us to believe that

- for all x_1 and x_2 such that he is referring by Strether's 1 to x_1 and by the 7 hotel 8 to x_2 , x_1 reached x_2 ;

The two parts of /6/, which are collapsed in the original formulation /2/, are to characterize the two parts of the meaning of the text. The first part of the meaning is its thematic part; it essentially consists of the reference conditions and other conditions associated with the referential expressions of the text. The second part of the

meaning is its rhematic part; it essentially consists of conditions specifiying 'what is said' of anything that satisfies the thematic part (' x_1 reached x_2 ' etc.), and 'how it is to be taken' by the addressee ('wants us to believe'). Both parts are subject to the fictionality proviso. 3

Inclusion of a *narrator* would be as in /3/. If a narrator is included, "he" is /6/ must be understood to refer back to the narrator not the author throughout.

What is formulated by /6/ is the content of a hypothesis on the meaning of text /1/. If the hypothesis is correct, /6/ also is a formulation of the meaning. We shall not discuss the hypothesis any further but concentrate on a more restricted question: provided the hypothesis is correct, what are the meanings that the referential expressions of text /1/ have in the text?

- 3. Textual meanings of referential expressions
 - 3.1. Author-independent meanings of referential expressions

The following expressions are assumed to be the referential expressions of the text quoted in /1/:

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/7/ a. Strether's
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- b. Strether's 1 first 2 question 3
- ·c. hes
- d. the, hotel8
- e. his
- f. his 11 friend 12
- g. his 15
- h. his learning 16 ... till 24 evening 25
- i. Waymarsh₁₈
- j. evening 25
- k. he 24

All referential expressions happen to be definite singular nouns or noun phrases or definite singular pronouns. In Lieb (1979) I have proposed a semantic analysis of such nouns and noun phrases which, suitably extended to cover proper names and pronouns, will here serve as my theoretical background.

Take an expression of the form Definite Article + Singular Noun, such as the_7 $hotel_8$. Such expressions always are referential ones in the sense that reference conditions can be associated with them. Various meanings of the expressions can be distinguished. We may here restrict ourselves to a single type, referential-doxastic meanings. Very informally these may be characterized as follows.

- /8/ For any expression of the form Def Art + Sg N, a referential-doxastic meaning of the expression is any meaning that imposes the following conditions on the normal use of the expression in utterances:
 - a. There is exactly one object to which the speaker is referring by the expression in the utterance.
 - b. Whatever the speaker is referring to by the expression in the utterance belongs to the 'reference basis' for the head of the expression (the noun) relative to the speaker, the utterance, and some lexical meaning of the head.
 - c. The speaker assumes that any addressee has some knowledge of what the speaker is referring to.
 - d. The speaker presupposes that whatever he is referring to has the properties specified by the lexical meaning of the head.

Suppose that the expression is the $_7$ hotel $_8$, and a certain concept, 'hotel $_1$ ', is taken as the lexical meaning of hotel $_8$, the head of the expression. 5 /8/ then applies as follows (English =df the English used by Henry James in text (1)):

- /9/ The referential-doxastic meaning of the 7 hotel 8 relative to 'hotel ' and with respect to word sequence /4/, an appropriate syntactic analysis of /4/, and English = the relation between utterances and speakers such that:
 - a. There is exactly one x to which the speaker is referring by the_{γ} hotel, in the utterance.
 - b. For all x, if the speaker is referring to x by the 7 hotel₈ in the utterance, then x is in the reference basis for hotel₈ relative to the speaker, the utterance, and 'hotel₁'.
 - c. The speaker assumes that, for all x, if he is referring to x by the_7 hotel₈ in the utterance, then any addressee of the utterance has some knowledge of x.
 - d. The speaker presupposes that, for all x, if he is referring to x by the notel in the utterance, then x is in the extension of 'hotel'.

Conditions /9a/ to /9c/ form a reference condition that can be associated with the notel 8. The meaning is called referential because the reference condition requires existence of exactly one referent (exactly one object the speaker is referring to); cf. (9a). The meaning is called doxastic because the referent must satisfy a speaker assumption (concerning the addressee's familiarity with the referent); cf. /9c/. Condition /9b/ requires that the referent be selected from the reference basis, that is from the 'set of relevant objects': at the time of uttering the notel 8, the speaker is willing to consider certain objects only as to whether they are or are not in the extension of 'hotel 1.

Condition /9d/ is a presupposition condition. There may be successful reference even if the speaker is mistaken in his belief that the referent is in the extension of 'hotel₁'.

3.2. Author-restricted meanings of referential expressions (textual meanings)

In /9/ we have identified a meaning of the notel that is independent of any specific speaker or utterance. We are, however, interested in the meaning that the notel that in the text quoted in /1/, a meaning that depends on Henry James. On our conception of a text (cf. Lieb (1980c), a text has an abstract part and a concrete part. In /9/ it is only the abstract part of text /1/ that has been taken into account. The concrete part comprises an appropriate portion of the original copy of The Ambassadors, for which we arbitrarily introduce the following name:

/10/ A* = df the smallest part of the original copy of *The Ambassadors* that contains a realization of word sequence /2/.

We wish to speak of a meaning that the_7 hotel $_8$ has in text /1/ with respect to A*, Henry James, and English, i.e. the the English used by Henry James in text /1/. Such a meaning will be taken as an entity of the same type as an author-independent meaning, i.e. as a relation u between utterances V and speakers V_1 . We introduce the following concept: "u is a meaning of f in t with respect to V, V_1 , and S, where "f" stands for any part of a word sequence of a text, "t" for any text, and "S" for any 'language system' (in particular, a system of a language variety, such as a dialect). The following implication is assumed to hold by definition:

/11/ For all u, f, t, V, V_1 , S, if u is a meaning of f in t with respect to V, V_1 , and S, then u holds between V and V.

As a first hypothesis we might simply identify the meanings of the_7 hotel₈ in text /1/ with the referential-doxastic meaning:

/12/ Hypothesis.

- a. There is exactly one u such that u is a meaning of the_7 hotel₈ in text /1/ with respect to A*, Henry James and English.
- b. For all u, if u is a meaning of the hotel in text /1/ with respect to A*, Henry James, and English, then u = the referential-doxastic meaning of the hotel relative to 'hotel' and with respect to ... [cf. /9/].

Because of /11/, the relation u that is the only textual meaning of the_7 hotel₈ must actually hold between A^* and Henry James, that is there must be exactly one x such that Henry James is referring by the_7 hotel₈ in A^* to x etc., cf. /9a/ to /9d/.

Hypothesis /12/ could be wrong in a number of ways. First, the notel could have several meanings in the text. Second, the textual meanings might be modifications of author-independent meanings by which a narrator is taken into account. Third, the author-independent meanings might not be referential-doxastic ones but meanings of other types. Fourth, they might be meanings not relative to the concept 'hotel' but relative to some other concept (we could have gotten the word meaning wrong).

More fundamentally, all meanings have to be modified by the fictionality proviso: A meaning of the_7 hotel 8 relative to A* and Henry James is not a referential-doxastic meaning but is the *pretending* of a referential-doxastic meaning. In other words:

- /13/ a. Henry Hames pretends of A* and himself the relation
 /9/ pretends that this relation holds between A*
 and himself.
 - b. The pretending of relation /9/= the relation between any (utterance) V and (speaker) V_1 such that V_1 pretends relation /9/ of V and V_1 .

The relation specified in /13b/ replaces relation /9/ as the meaning of the_7 hotel₈ in text /1/: /14/ Revised hypothesis.

- a. There is exactly one u such that u is a meaning of the_7 hotel 8 in text /1/ with respect to A*, Henry James, and English. [= /12a/]
- b. For all u, if u is a meaning of the hotel in text /1/ with respect to A*, Henry James, and English, then u = the pretending of the referential-doxastic meaning of the hotel relative to hotel and with respect to ... [cf. /9/].

The essential features of /14/ are as follows.

The (only) meaning of the_7 hotel $_8$ in the text is obtained as a function of an author-independent meaning of the_7 hotel $_8$, which itself is a relation between possible utterances and speakers (authors). The function, pretending, applies to the meaning and replaces it by a new relation between possible utterances and speakers that no longer involves actual references. By /ll/, this relation holds between A* and Henry James.

In the case of a fictitious narrator a second function intervenes between pretending and the author-independent meaning of the_7 hotel₈; assumption /ll/ again establishes the necessary link to A* and Henry James. The nature of the new function can only be determined after the account of the narrator that was suggested in /3/ has been made more precise.

- 4. Reference involving a narrator
 - 4.1. The place of the narrator

For the Ambassadors a first-person narrator must indeed be assumed. This 'I-narrator' must be a person satisfying the following requirements: Text /1/ - as part of The Ambassadors - is a text by the person; A* is the form of a realization of text /1/ by the person. The author of any

text may pretend or claim that a narrator is or is not identical with the author and has a number of other properties; in the case of a first-person narrator, identity is claimed or pretended. For dealing with the narrator of the Ambassa-dors, we introduce a relation defined as follows:

/15/ μ = df the relation between any V_1 and V_2 such that $V_1 = V_2$ and ... $V_1 V_2$...

where $\dots V_1 V_2 \dots$ is a formula whose free variables are at least " V_2 " and at most " V_1 " and " V_2 " and that formulates for V_2 the assumptions made by Henry James concerning a narrator of the *Ambassadors*. We may then suggest that hypothesis /6/on the meaning of text /1/ be replaced as follows:

/16/ Henry James pretends of A* and himself the relation defined for any V and V_1 as follows.

There is a V_2 such that: u holds between V_1 and V_2 (i.e. $V_1 = V_2$ and ... V_1V_2 ...), and text /1/ is a text by V_2 , and V is the form of a realization of text /1/ by V_2 , and

- there is exactly one x such that V₂ is referring by Strether's, in V to x, and ...;

The new hypothesis applies the general idea formulated in /3/ for taking a narrator into account: "The author pretends that there is a person who ... and who is the author of the given text and who wants us to believe that ...". Still, hypothesis /16/ has an important flaw: the reference conditions for $Strether's_1$ and the other referential expressions should be relativized not just to some narrator V_2 but to any narrator V_2 independently of the number of persons that satisfy the conditions for V_2 . This is taken into account by the following modification of /16/:

/17/ Henry James pretends of A^* and himself the relation defined for any V and V_3 as follows:

- a. There is a V_2 such that: u holds between V_1 and V_2 , and text /1/ is a text by V_2 , and V is the form of a realization of text /1/ by V_2 .
- b. For any such V_2 ,
 - there is exactly one x such that V₂ is referring by Strether's₁ in V to x, and ...;

"There is a V_2 " in /17a/ may be strengthened to read "there is exactly one V_2 ", which yields the case of a single narrator. The relation u as defined in /15/ involves identity; hypothesis /17/ therefore covers the case of a narrator fictitiously identical with the author. u may be replaced by a relation of non-identity to yield the case of a narrator fictitiously different from the author.

Assuming that /17/ is correct as a hypothesis on the meaning of text /1/, what are the meanings of referential expressions like the_7 hotel₈ in the text, and how are the meanings obtained?

4.2. Textual meanings of referential expressions that involve a narrator

The single meaning of the_7 hotel₈ in text /l/ is built up in two steps. As before, we start with the ferential—doxastic meaning of the_7 hotel₈ relative to 'hotel₁' and with respect to ... (cf. /9/). A certain function that remains to be determined applies to this meaning and yields the relation \bar{u} defined as follows:

- /18/ u = df the relation between any V and V_1 such that:
 - a. There is a V_2 as required in /17a/, i.e. u as defined in /15/ holds between V_1 and V_2 , and text /1/ is a text by V_2 , and V is the form of a realization of text /1/ by V_2 .

b. For any such V_2 , the referential-doxastic meaning of the $_7$ hotel $_8$ relative to 'hotel $_1$ ' and with respect to ... holds between V and V_2 .

To \bar{u} we apply the function of pretending and obtain /19/ \bar{u} = df the relation between any V and V_1 such that V_1 pretends \bar{u} of V and V_1 .

The function that directly applies to the referential-doxastic meaning of the_7 hotel $_8$ is defined as follows ("V", "V $_1$ ", "V $_2$ " range over arbitrary events or objects in spacetime, such as speakers and speech objects or events; "u", "u $_1$ " range over relations between entities V and V_1 ; "t" stands for any text):

- /20/ The u-narrator-of-t version of u_1 = df the relation between any V and V_1 such that:
 - a. There is a V_2 such that u holds between V_1 and V_2 , and t is a text by V_2 , and V is the form of a realization of t by V_2 .
- b. For any such V_2 , u_1 holds between V and V_2 . Having the two functions of narrator version and pretending at our disposal, we identify the meaning of the 7. hotel₈ in text /1/ by the following hypothesis that takes the place of the first revised hypothesis /14/: /21/ Second revised hypothesis.
 - a. There is exactly one u such that u is a meaning of the_7 $hotel_8$ in text /l/ wiht respect to A*, Henry James, and English. [Same as /12a/ and /14a/.]
 - b. For all u, if u is a meaning of the_7 hotel $_8$ in text /1/ with respect to A^* , Henry James, and English, then u = the pretending of the u-narrator-of-text-/1/ version of the referential-doxastic meaning of the_7 hotel $_8$ relative to 'hotel $_1$ ' and with respect to ... [cf. /9/].

By the original hypothesis /12/ the meaning of the_7 hotel $_8$ in the text was simply the referential-doxastic meaning. By the first revised hypothesis /14/ it was a func-

tion (pretending) of the meaning. By /21/ it now is a function (pretending) of a function (narrator version) of the referential-doxastic meaning. This mirrors the growing distance form 'real-life reference' introduced first by fictionality and then by narrator insertion.

Our account avoids a major mistake in construing 'reference through a narrator': By setting up the function of narrator version as in /20/ and using it as in /21/, it construes 'reference through a narrator' without falling into the trap of hypostatizing a fictitious narrator into a real person. The only spatio-temporal entities to whose existence we remain committed are A* and Henry James.

There are many questions that our account of reference and fictionality and reference and the narrator does not yet answer, or even fails to raise. For instance, what is an adequate interpretation of "pretends"? For what texts is it correct to assume fictionality in the sense of pretending? What is the role of pretending, or analogous propositional attitudes, for defining literary geners? I will pick out just one among the unsettled problems: giving a satisfactory analysis of proper names in fiction. In particular, how are we to deal with proper names that appear in a novel but seem to involve reference to real-world entities such as places or persons? After all, this is a case typical of so-called historical novels. In the remaining part of this paper I shall outline my answer to this question.

5. Dealing with proper names

5.1. General framework

There is a vast literature on the semantics of proper names, especially in the philosophy of language. I shall presuppose familiarity with the main types of analyses proposed in the literature and will not, in the present context,

relate my own account to existing proposals. Novel features of my approach will be easily recognized, just as partial agreement with previous accounts.

Proper names, more specifically, singular forms of proper names, will be treated as a special subcase of definited singular nouns. What, then, is an author-independent meaning of Strether's, in particular, what is a referential-doxastic meaning?

For identifying a referential-doxastic meaning of the_7 hotel $_8$ we had to assume a certain concept, 'hotel $_1$ ', as a lexical meaning of $hotel_8$. It has been a much debated question in the literature whether lexical meanings may or may not be assumed for proper names. I will posit such meanings, proceeding from the following idea: a lexical meaning of a proper name is a concept whose intension consists of the property of 'being called by that name'.

As an example of such a concept consider /22/ 'Strether₁' = the concept whose intension is the set $\{St\}$, where St = df the property of being an x such that x is called $Strether^P$ in English.

English is a system of a certain variety of English (possibly, only an idiolect of Henry James); Strether is a word paradigm of that system (having at least two different forms, represented by the nominative and the Saxon genitive; paradigm status is indicated by the P-superscript). The notion of concept again is understood as in Lieb (1979). The main difference between 'Strether' and a concept such as 'hotel' consists in the fact that the intension of the former is language dependent (involves a property that presupposes a system of a certain language variety or an idiolect), while the latter is not. The key term in the definiens of "St", ".. is called..in..", stands in need of explication but will here be left undiscussed.

Given the concept 'Strether,', a referential-doxastic

meaning of $Strether's_1$ is obtained in strict analogy to the corresponding meaning of the_7 hotel, cf. /9/:

- /23/ The referential-doxastic meaning of Strether's relative to 'Strether' and with respect to word sequence /4/, an appropriate syntactic analysis of /4/, and English = the relation between utterances and speakers V₁ such that:
 - a. There is exactly one x to which V_1 is referring by $Strether's_1$ in V.
 - b. For all x, if V₁ is referring by Strether's₁ in V to x, then x is in the reference basis for Strether's₁ relative to V, V₁, and 'Strether₁'.
 - c. V_1 assumes that, for all x, if V_1 is referring by $Stretner's_1$ in V to x, then any addressee of V has some knowledge of x.
 - d. V_1 presupposes that, for all x, if V_1 is referring by $Strether's_1$ in V to x, then x is in the extension of 'Strether'.

The meaning of Strether's in text /l/ is obtained exactly as before by applying the relevant functions to the referential-doxastic meaning. The following hypothesis corresponds to the second revised hypothesis for the meaning of the hotel 8, cf. /21/: /24/ Hypothesis.

- a. There is exactly one u such that u is a meaning of Strether's in text /l/ with respect to A*, Henry James, and English.
 - b. For all u, if u is a meaning of Strether's in text /1/ with respect to A*, Henry James, and English, then u = the pretending of the u-narrator-of-text-/1/ version of the referential-doxastic meaning of Strether's relative to 'Strether' and with respect to word sequence /4/, an appropriate syntactic analysis of /4/, and English.

Spelled out in detail the meaning u is /25/ the relation between any V and V_1 such that V_1 pretends that

- a. there is a V2 such that
 - (a) $V_1 = V_2$;
 - (β) ... V₁V₂ ... (informally: V₂ satisfies the conditions specified explicitly or implicitly by Henry James for a narrator of the Ambassadors);
 - (γ) text /1/ is a text by V_2 ;
 - (δ) V is the form of a realization of thext /1/ by V_2 ;
- b. for any V_2 , if V_2 satisfies (aa) to (a8), then V and V_2 satisfy /23a/ to /23d/, i.e.
 - (a) there is exactly one x to which V₂ is referring
 by Strether's₁ in V;
 [etc., cf. /23/].

By /11/ and /24/ relation /25/ holds between $A \star$ and Henry James.

5.2. Discussion

Hypothesis /24/ is sound only if the referential—doxastic meaning of Strether's relative to 'Streher' has been correctly specified, and this meaning depends on the way in which the concept 'Strether' was set up. With respect to this concept we took the rather radical position that the only thing necessarily shared by all 'Strethers' is the fact that they are called this way. It may be argued, however, that we have failed to take account of certain semantic aspects either by the lexical meaning or by the referential-doxastic meaning of Strether's For instance, according to the initial hypothesis /2/, 'Strether' was to be a man or a boy.

We may argue for this assumption as follows he_5 is

obviously 'coreferential' with Strether's, 13 Assuming a normal use of the pronoun, actual reference by a form of he must be to a male human past the earliest infant stage or to a male animal such as a dog or, possibly, to some kind of a robot, disregarding a few other, even more marginal possibilities. In a 'realistic' novel pretended reference also satisfies these conditions, which is not necessarily true of a fairy-tale. Since the pretended referent of Strether's, is to be able to ask questions and robots have to be ruled out for a realistic novel in 1903, a man or a boy is most likely as the pretended referent of Strether's,

It is quite sufficient for this argumentation to assume the lexical meaning of $Strether's_1$ to be as in /22/ and the referential-doxastic meaning as in /23/. On the other hand it certainly is compatible with the argumentation to introduce the property of being a male human directly into one of the meanings of $Strether's_1$. This may be done in either of two ways.

First, 'Strether' as a lexical meaning of Strether's could be replaced by the following concept:

/26/ 'Strether2' = the concept whose intension is the set {Str}, where Str = df the property of being an x such that x is a male human and is called Strether in English.

Or else, we could add a presupposition condition to the referential-doxastic meaning of $Strether's_1$, that is, a different referential-doxastic meaning would be assumed; /27/ V_1 presupposes that, for all x, if V_1 is referring by $Strether's_1$ in V to x, then x is a male human.

For other proper names femaleness would have to be presupposed, or being a location, or still other properties. It would be theoretically awkward to assume different types of referential-doxastic meanings for different types of proper names. To avoid this, a function operating on the original

nal referential-doxastic meanings could be assumed that assigns to meaning /25/ the relation between utterances V and speakers V_1 that consists in V and V_1 satisfying both the referential-doxastic meaning /25/ and the additional presupposition condition /27/. Still, different functions would be needed for different types of proper names.

Neither the first nor the second solution has to be chosen if we fall back on the reference basis for an occurrence of a proper name (cf. /23b/); conditions such as maleness can possibly be treated as restrictions on the reference basis when the referential-doxastic meaning is restricted to an utterance and a speaker.

The entire question may seem irrelevant for a name such as $Strether^P$, which is a family name rather than a Christian name, but cannot be shunned for names like Ann^P or $John^P$. I leave it undecided which solution should eventually be preferred.

On our analysis, reference by means of Strether's 1 is entirely covered by the fictionality proviso, and rightly so. Such an analysis may seem inappropriate in the cases that will now be discussed.

6. Proper names and the actual world

Adding the second sentence of *The Ambassadors*, we consider the following text:

/28/ Strether s first question, when he reached the hotel, was about his friend; yet on his learning that Waymarsh was apparently not to arrive till evening he was not wholly disconcerted. A telegram from him bespeaking a room "only if not noisy," with the answer paid, was produced for the inquirer at the office, so that the understanding that they should meet at Chester rather then at Liverpool remained to that extent sound.

Chester and Liverpool are cities in the actual world. On a correct understanding of *The Ambassadors* it is at Chester rather than at Liverpool, both in the actual world, 'that Waymarsh and Strether had the understanding to meet'. It appears, then, that there must be reference to cities in the real world by means of the two place names. On the other hand, fictitious characters don't meet in such places.

Put in a nutshell our solution to the problem is as follows: Henry James pretends that the narrator believes that he is referring to a place that is identical with the real Chester (with the real liverpool); we are confronted with the fiction of a narrator who identifies a place he is referring to with Chester in the actual world. How may this be construed formally?

We begin by introducing the word sequence of /28/ (of the text quoted in /28*) as the sequence Strether's₁...
...Chester₆₃...Liverpool₆₇...sound₇₂, in analogy to /4/.
Discussion will be restricted to Chester₆₃.

As a lexical meaning of $Chester_{63}$ we take a concept 'Chester₁' defined in strict analogy to 'Strether₁' in /22/. The referential-doxastic meaning of $Chester_{63}$ is determined in strict analogy to /23/, which specified the corresponding meaning of $Strether's_1$: ¹⁴

- /29/ The referential-doxastic meaning of $Chester_{63}$ relative to 'Chester₁' and with respect to word sequence /28/, and appropriate syntactic analysis of /28/, and the English used by Henry James in text /28/ (assumed to be identical with the English used in text /1/, hence, with English) = the relation between utterances V and speakers V_1 such that:
 - a. There is exactly one ω to which V_1 is referring by ${\it Chester}_{63}$ in V.
 - b. For all x, if V_1 is referring by $Chester_{63}$ in V to x, then x is in the reference basis for $Chester_{63}$ relative to V, V_1 , and 'Chester₁'.

- c. V_1 assumes that, for all x, if V_1 is referring by $Chester_{63}$ in V to x, then any addressee of V has some knowledge of x.
- d. V_1 presupposes that, for all x, if V_1 is referring by $Chester_{63}$ in V to x, then x is in the extension of 'Chester, '.15

No real-world Chester figures in the referential-doxastic meaning of Chester 63. Such a Chester is brought in by a modification of /29/: in addition to what is specified by /29/, the speaker V_1 also believes that whatever he is referring to is identical with Chester in England. For a proper formulation two additional constants are required in our semantic metalanguage:

/30/ "Chester-in-England", a constant of the same type as the variable "x" and interpreted to denote a certain city in the actual world, located in England close to Liverpool,

and a functor "application", defined as follows:

- /31/ The application to x of f given u = df the relation between any V and V_1 such that
 - a. u holds between \bar{V} and V_1 ;
 - b. V_1 believes that, for all x_1 , if V_1 is referring by f in V to x_1 , then $x_1 = x$,

where "f" stands for any part of a word sequence. In particular,

- /32/ the application to Chester-in-England of $Chester_{63}$ given the referential-doxastic meaning of $Chester_{63}$ relative to 'Chester₁' and ... [cf. /29/] = the relation between any V and V_1 such that:
 - a. V and V_1 satisfy /29a/ to /29d/.
 - b. V_1 believes that, for all x, if V_1 is referring by $Chester_{63}$ in V to x, then x = Chester-in-England.

The meaning of $Chester_{63}$ in text /28/ is now obtained by applying the functions of narrator version and pretending

(8* = the smallest part of the original copy of The Ambassadors that contains a realization of the word sequence of the text quoted in <math>/28/):

/33/ Hypothesis.

- a. There is exactly one u such that u is a meaning of Chester 63 in text /1/ with respect to \mathcal{B}^* , Henry James, and English.
- b. For all u, if u is a meaning of Chester₆₃ in text /28/ with respect to B*, Henry James and English, then u = the pretending of the u-narrator-of-text--/28/ version of the application to Chester-in--England of Chester₆₃ given the referential-doxastic meaning of Chester₆₃ relative to 'Chester₁' and ... | cf. /29/1.

On this hypothesis the textual meaning u of ${\it Chester}_{63}$ is a function (pretending) of a function (narrator version) of a function (application) of the referential-doxastic meaning of ${\it Chester}_{63}$. Spelt out in detail the meaning is /34/ the relation between any ${\it V}$ and ${\it V}_1$ such that ${\it V}_1$ pretends that

- a. there is a V₂ such that
 - $(\alpha) V_1 = V_2;$
 - (β) ... V_1V_2 ... (informally: V_2 satisfies the conditions specified explitly or implicitly by Henry James for a narrator of *The Ambassadors*);
 - (γ) text /28/ is a text by V_2 ;
 - (6) V is the form of a realization of text /28/ by V_2 ;
- b. for any V_2 , if V_2 satisfies $(a\alpha)$ to $(a\delta)$, then
 - (a) V and V_2 satisfy /29a/ to /29d/;
 - (β) V_2 believes that, for all x, if V_2 is referring by Chester₆₃ in V to x, then x = Chester-in-England.

By /ll/ and /33/, relation /34/ holds between B^* and Henry James. This does not imply that Henry James refer to Chester in England by $Chester_{63}$ in B^* . At the same time a complex semantic relation to Chester in England is indeed established; this relation involves both the reference relation and the fictionality proviso.

The meanings that expressions like Chester 63 have in fictional texts with a fictitious narrator may well be among the most complex cases of 'referential meaning' anywhere. 16 We have isolated a semantic relation between such expressions and objects in the actual world that involves, but is different from, a reference relation. There are other semantic relations of this type, for example, the relation that holds in a roman a clef between a name of a character and its intended counterpart in the real world, but these cannot here be discussed any further.

The present paper has been exploratory. We stayed as close to an actual example as possible, gradually disengaging the outlines of a more general picture. Formal rigour was used only when it was forced upon us (which was increasingly the case). Hopefully, the results of this paper will seem encouraging enough to go on with a precisely formulated general theory.

Notes

Sections 1 to 3 of this paper are largely identical with a paper read at The International Conference on the Structure of Narrative, University of Szeged (Hungary), Sept. 11-13, 1980, and at The International Semiotic Symposium "Theoretical Semiotics: Verbal Signs - Visual Signs", University of Warsaw (Poland), Sept. 22-24, 1980

The present complete version has profited a great deal from discussions during the two conferences. I am particularly indedted to Manfred Bierwisch for extensive comments.

- A sequence is taken as a relation (a set of ordered pairs) that assigns exactly one object to each of the integers 1,...,n, for some n. Thus, the word sequence of /l/ is the set of pairs {(1, Strether's, ..., (30, disconcerted)}, abbreviated as above. Note that the abbreviation also applies to parts of the sequence, for instance, the hotel = {(7, the), (8, hotel)}.
- There are problems with 'the original copy' of The Ambassadors (cf. Stallmann 1960: 38lf), which will here be disregarded.
- 3 In Lieb (1980a), "thematic part" and "rhematic part" are introduced with respect to sentence meanings. They are here applied to the meaning of a text that has a single complex sentence, in a very preliminary way. As a reformulation of (2), (6) does not yet provide a final version even for the parts of (2) that are directly represented,
- The underlying syntactic-semantic theory of English allows only for nouns and noun phrases (including pronouns and proper names) as referring expressions. The when-clause in (1) has been interpreted in the sense of "When he reached the hotel, Strether's first question ...", i.e. not in the sense of "Strether's first question when ..." (cf. the comma in front of when).
- Word meanings are taken as concepts in a psychological sense, as explained in Lieb (1979: Sec. 2) and defended in Lieb (1980b).

- Being a concept, 'hotel₁' has an intension (a set of properties, in this case) and an extension: the set of objects that have all the properties in the intension.
- By a realization of a text we understand an n-tuple consisting of a speech object or event, a 'meaning' of the object or event, and possibly certain other entities; the speech object or event is the form of the realization; cf. Lieb (1980c)
- I would suggest an interpretation along the following lines. In pretending u of V and V_1 , V_1 believes that u does not hold between V and V_1 , and does not want that any addressee should believe it does; at the same time V_1 wants that no addressee of V should act on the assumption that u does not hold between V and V_1 (pretending implies a wish for the suspension of disbelief).
- For example, a text in which a myth is told by somebody who believes in it is not a fictional text if pretending is explicated as above, fn. 8. I suggest that this case may be covered by assuming a propositional attitude of the author that is different from but analogous to pretending. There may well be a number of different propositional attitudes each of which may take the place of pretending.
- I suggest that propositional attitudes as criteria of classification cut right across literary genres: 'fiction', if meant to cover all ficitional texts, should not be set up as a genre.
- The question was brought up repeatedly in the discussions following the Szeged and Warsaw presentations of the shorter version of this paper.

- 12 In view of well-known examples such as the king of England's son it may be more adequate to analyse Strether's into Strether₁ s₂ and exclude all Saxon genitives as forms of nouns; this is immaterial though to our present discussion.
- 13 Coreference is one of the problems that are not discussed in this paper.
- Note that discussion in Sec. 5.2 carries over in its entirety to the lexical and referential-doxastic meanings of Chester₆₃.
- According to my atlas of the world, there are several x in the extension of 'Chester₁', one in England and four in the United States.
- Even in a novel proper names may occur outside the fictionality proviso (the pretending operator); for instance, documentary material may be included without really being 'worked into' the novel. As a rule, though, it should be the analysis in Secs 5 and 6 that applies.

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