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Proceedings of the Twelfth Annual Meeting of the Berkeley Linguistics Society (1986), pp. 539-550

FROM POLYSEMY TO INTERNAL SEMANTIC RECONSTRUCTION

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Introduction

In the last few years a number of linguists have argued that polysemy should be accounted for in a theory of the lexicon (e.g. Lindner 1981, Lakoff 1982, Brugman 1983, Sweetser 1984), and should not necessarily be forced into categoriality, whether it is the macro-categoriality of the Gesamtbedeutung type that obscures necessary distinctions, or the micro-categoriality that treats most meaning differences as cases of homonymy and thereby obscures obvious similarities. When admitted in semantic theory, polysemy has traditionally been argued for only where distinct but related senses are associated with a lexical item that belongs to one syntactic category, but Brugman (1983) has argued convincingly in connection with the senses of prepositional, adverbial, and derivational *over* that polysemy pertains to conceptual structures that override syntactic categorization.

Most earlier work on polysemy viewed it as the result of historical changes (e.g. Breal 1964 [1897], Ullmann 1964). Recently it has been viewed largely from the synchronic perspective, though Brugman has suggested in her studies of *over* (1983) and of *very* (1984) that the synchronic processes leading to polysemy (e.g. chaining of image-schemata leading from prototypical to more marginal senses) may shed light on the historical processes. And Sweetser has suggested that metaphorical extensions in synchrony should be viewed side by side with those occurring in diachrony.

In this paper, I will assume that a semantic theory must allow for polysemy because polysemy accounts for important aspects of cognitive process. Furthermore, I assume that polysemy is not restricted to lexical items belonging to single syntactic categories. My purpose is to show that admitting polysemy in semantic theory has the added methodological advantage of allowing us to do extensive internal semantic reconstruction. By internal semantic reconstruction, I mean hypothesizing on the basis of the synchronic senses of a lexical item the historical order in which those senses arose. Just as in phonology a theory of synchronic phonological relatedness, together with a theory of possible sound change, can be used (with well-known constraints) to do internal

phonological reconstruction, so, I will argue, a theory of synchronic semantic relatedness, i.e. polysemy, together with a theory of possible semantic change, can be used to do internal semantic reconstruction. Gesamtbedeutung would be too abstract and global to allow this--one must have difference to reconstruct--and homonymy would forbid it, since one must have relatedness as well as difference to reconstruct.

Until recently, there has been insufficient evidence for unidirectionality in processes of semantic change to permit attempts to project semantic change backwards. Such well-known types of semantic change as 'amelioration' and 'pejoration', 'specification' and 'generalization' are too contradictory to encourage such an exercise. However, there is coming to be overwhelming evidence for one type of unidirectionality in semantic change, and it turns out to be a very effective predictor of the historical order in which synchronically polysemous meanings arose. It is a change that I identified in broad outlines a few years ago (Traugott 1982) and have come to refine slightly. In essence the process is one of 'subjectification':

> Over time, meanings tend to come to refer less to objective situations and more to subjective ones (including speaker point of view), less to the described situation and more to the discourse situation.

This hypothesis encompasses Langacker's concept of subjectification, developed to account for synchronic semantic extension:

> Expressions describing <u>physical</u> motion by an <u>objectively</u>-construed mover (typically the subject) come to describe static situations construed in terms of <u>abstract</u> and <u>subjective</u> motion by the <u>conceptualizer</u> (Langacker 1986)

but is not limited to the extension of expressions of motion into static expressions. It also encompasses Sweetser's hypothesis that there is a tendency

> to use vocabulary from the external (sociophysical) domain in speaking of the internal (emotional and psychological) domain (Sweetser 1984:56).

However, the subjectification process, as I define it, is broader, in that it focusses on a very general tendency toward greater pragmaticization of meaning. As will be discussed below, in certain areas such as mental vs. speech act verb meanings, discourse meanings appear to override the distinction Sweetser makes between external and internal domains.

The claim that meanings become increasingly

discourse-based, indeed increasingly speaker-based, is a large generalization that covers a number of different phenomena. It includes the well-known development of affective meanings from referentially more neutral meanings as illustrated by *boor* < 'ill-bred fellow' < 'peasant', in other words, most of the traditional examples of pejoration and amelioration. It also includes the development of causal from temporal meanings as illustrated by *since* 'because' < 'after' (causal relations in natural language are more 'person-based', more 'speaker-attributed' than temporal ones). Another well-known example is the shift of spatial prepositions and postpositions to markers of grammatical relations; e.g. Old Eng. *of* meant 'from' and came to mark the possessive relation only in Middle English. One of the clearest examples of the change is Old Eng. *hwile* 'at that time' > Middle Eng. 'during' > Mod. Eng. 'although'. Here an adverb referencing a time in the described situation comes to be a conjunction expressing not only temporality in the described situation but also textual cohesion, and then comes to express the speaker's own view of the relation between two situations.

This semantic shift from less to more discourse-based (and therefore speaker-based) meanings is interesting in several respects. For one, it might seem counter-intuitive on first thought, given what we know about small children's cognitive development and the shift from more subjective to more objective understanding, and given notions about the objectivizing force of literacy. Nevertheless, on further thought it makes sense, since at the same time as children are learning to think objectively they are using language to achieve more and more strategically planned interaction. Furthermore, there is massive evidence of the type of metaphorical interpretation Sweetser talks about, whereby abstract domains are conceptualized in terms of more concrete ones. Secondly, the change may at first appear to provide a potential counterargument against those who claim that the origins of syntax lie in discourse (e.g. Sankoff and Brown 1976). However, it does not represent a counterargument provided we distinguish the motivating factor (development of cohesive discourse) from the lexical items used to achieve that end. Sankoff and Brown discuss the use of Tok Pisin *ia* 'here' to identify a referent and eventually to express the relationship known as relativization. This shift exactly matches the semantic change I have outlined: a word referencing a space identifiable in the described situation becomes a

marker of discourse-meanings (a marker of a space identifiable in the proposition, in other words, of an NP). In this case there is a 'speaker-meaning' all the way along, since *ia* is a deictic to start with; however, the speaker based meanings shift from referencing the situation outside the discourse to referencing the situation inside the discourse. Much the same is true of the development in English of the spatial adverb *there* into the existential *there* as in *There was a power-failure on Friday*. A third point to be made is that, except where a form becomes purely syntacticized, and thereby loses much of its meaning, the process of pragmaticization of meaning involves shifts of meaning from the semantic into the pragmatic domain. There has been a tendency to use the term 'bleaching' both for pragmaticization of meaning and for the syntacticization that leads to dummy markers. Though the first process may give rise to the second, they are not the same process, and have probably been treated as one only because of the uncertainty until recently about the role of pragmatics in a grammar.

Armed with the generalization about subjectification in semantic change, we can look at synchronically-defined dictionary entries in a language for any period of that language with new eyes. In many (but certainly not all) cases, hypotheses about the order of development can readily be made, at least for the more general classes of meaning differences. Just as in the case of internal phonological reconstruction, loss or merger may obscure some actual paths of change. But the project can be quite successful nonetheless. I will devote the rest of this paper to illustrating some examples of backward-projecting hypotheses that can be made from the meanings of words in two lexical fields in English: 'presuppositional' terms like *just*, and speech act verbs like *insist*.

Presuppositional terms

The first study I did of the feasibility of doing internal semantic reconstruction was a micro-analysis of the polysemy of *just* (Traugott Forthcoming). I wanted to see whether it was possible to hypothesize the correct order of the development of the various senses of this word, and whether the adjectival and adverbial meanings could be related. Among adjectival meanings are 'honorable', 'righteous', 'well-founded', 'properly due', 'fitting' and 'exact' (cf. *just measure*). Among adverbial meanings are 'precisely', 'simply', 'in the immediate future or past', 'merely', 'barely'. Given the change to more discourse-based and

speaker-based meanings, one can readily hypothesize that the meanings that have to do with justice and honor are relatively early, since, although evaluative, they refer to norms that have some external verification; meanings relating to exactness are more abstract and could be expected to be later; the deictic temporal meaning and the negative 'merely' meanings, being dependent on speaker judgement, can be presumed to be the latest meanings. And indeed meanings related to 'precise' date back to the fifteenth century, the temporal deictic and 'merely' meanings to the seventeenth century. One can, of course, be bold and guess that evaluative as the 'judicial' meanings 'honorable' etc. are, they may have once been less so, but this we cannot tell from Modern English. If we go back to Indo-European, we find that IE *yous, according to Benveniste (1973) meant 'state of regularity, normality required by the rules of ritual'. He emphasizes that we may think of Latin jurare 'to pronounce the law' as primarily judgemental and therefore evaluative, but in fact it meant 'to repeat a formula', and was hardly evaluative at all.

Just is, of course, only one of a whole class of so-called 'presuppositional' terms that presuppose, entail, or implicate relations to a scale. Other such terms include mere, even, utter, and very. All of them, at least in some of their meanings, express speaker attitudes. Given the process of subjectification, we can hypothesize that all these words once had meanings that referred primarily to described situations. Mere meant 'undiluted' (as of wine), even meant 'horizontal, equal', utter comes from 'outer' (later in the sense of 'outermost'), and very from 'true'.

But this is not all that there is to say. Let us look in a little more detail at one of the words, very, for which Brugman (1983) has given a detailed synchronic analysis. She identifies two major classes of meanings: i) those that involve the extreme end of a scale, as in the very pinnacle of her career, the very back of the room, the very best croissants, or the extreme end of an implicational scale, as in the very thought of writing a dissertation puts me into a cold sweat; and ii) those that mean something like 'precise', 'identical', as in the very person I have been waiting to see, Chomsky's very words. Note that very can be substituted by mere in the very thought of writing a dissertation (cf. also even the thought...), and (with word order change) by just in the very person I wanted to see.

Granted that all these meanings of adjectival very

are discourse-based, can one hypothesize in what order they developed? What seems precise to me may not always seem precise to you; nevertheless, there are often external means of verification: for example, you and I have external means of judging whether some string was or was not actually Chomsky's words. Therefore, very in its meaning 'precise' has some reference to the described situation. But we'd have a harder time verifying the very back of the room. Verification is hardly the issue when we talk of the very pinnacle of someone's career. And it is not an issue at all in the implicational use of very as in the very thought of writing a dissertation. Here the meaning is entirely speaker-based. In other words, the meanings typified by Chomsky's very words, the very back of the room, the very thought are on a scale of less to more indicative of speaker attitude. We might conjecture that the meanings came in in this order. And a look at the OED confirms that they did, though the gap in time between the first two is rather small to be strong evidence for the ordering between them: 'precise' (the very center) in 1338, 'extreme' (the very end) in 1386, and 'implicational extreme' (the very mountains, the very mention) in 1550.

We have noted that both just and very have meanings related to 'precision' and'truth' and that these preceded more 'up-toning' and 'down-toning' meanings. Up-toning meanings focus on the high end of a scale, down-toning meanings on the low end. Very is mostly an up-toner in the 'extreme' meanings, but serves as a down-toner in the very (=mere) thought of writing a dissertation, i.e. something as low on the probability scale as the thought of writing a dissertation. Since up-toning and down-toning meanings identify points at the extremes of a scale, they imply asymmetric relations (less, more, not equal). The shift from meanings referring to preciseness, sameness, parallelism, simultaneity, and so forth to asymmetric meanings is in fact quite frequent. As I pointed out at the beginning while, meaning 'during', and therefore involving at least partial simultaneity of events, came to mean 'although' (or 'contrary to what might be expected', that is, non-parallelism with expectation). Presently used to mean 'at the very time' but came to mean 'soon after, in a while'. Besides, which used to mean 'at the sides of', i.e. symmetrically on both sides, came to mean in addition. We may, then, be fairly confident in hypothesizing that a word like mere, which is only a down-toner in contemporary English, may once have meant something like 'true' or

'precise'. And indeed it did. As we saw, the original Latin merus meant 'undiluted'; in French it was used as a legal term to mean 'true, absolute'. The first uses in English are in the Latin and French senses. An interesting example from the mid-sixteenth century, which also includes very in the sense of 'precise' is:

1559-60 That your Majestie...is, and in verie deed, and of most meere right ought to be...our most rightful...soveraigne

From 'true'mere came to mean 'not more than specified':

1581 If I speeke rather lyke a meere Citizen, than a Philosopher

This brings us to even. The adjectival senses listed by the American Heritage Dictionary are: 'having a horizontal surface', 'parallel', 'regular', 'equal', 'having equal probability' (an even chance); the adverbial ones are: 'to a higher extent' (even more), 'in spite of' (even with his head start). We hardly need the extra item 'arch. identical with: It is I, even I', to guess the relation between the adjective and the adverb, or to reconstruct the main outlines of the meaning change. For the adverb we find in Old Eng. the meanings 'regularly', 'in equal parts', 'exactly', 'precisely'. 'In spite of' is a late sixteenth century meaning, and 'even more' a mid-eighteenth century one.

Speech act verbs

So far I have focussed on 'presuppositional' words. They belong to a small lexical set which is rather special type, and might be considered inadequate evidence for the large-scale claim that it is possible to do semantic internal reconstruction. I turn now to a brief summary of evidence from a rather different kind of lexical domain: that of speech act verbs.

Many speech act verbs have several meanings. Thus to assume can mean to 'put on' (as of clothes), 'take for granted', or to 'claim', 'pretend that something is the case'. To observe can be to 'adhere to a rule or custom' (cf. observe Christmas), to 'watch attentively', or 'say that something is the case'. To commit can be to 'do' (commit a murder), 'place in trust', 'confine' (in prison), or to 'pledge oneself to do something'. To insist can either be to 'demand something' or to 'assert something vehemently' (cf. I insist that he not smoke vs. I insist that he didn't smoke).

Given the claim that meanings come to refer less to the described situation, and more to the discourse situation, it follows that a reasonable hypothesis should be that where both non-speech act verb and

speech act verb meanings coexist, the former precede the latter in time, because the speech act meaning is a metalinguistic one that at least refers to the described situation as a discourse situation, and in some cases (those called performative uses) is actually constitutive of the discourse situation. And indeed this is the case. Thus assume originally meant first to 'take on', 'adopt' (cf. Lat. ad-sumere 'to take on'); it was borrowed into English in the sixteenth century with both meanings 'put on' and 'suppose'; the first entry in the OED with a speech act meaning dates from 1714. Similarly, observe meant to 'pay practical attention to a rule' in Middle English; the OED gives the meaning 'perceive by the senses' in 1559 (a mental verb meaning), and attributes the speech act verb meaning to Bacon in 1605. Commit appears first in the fourteenth century and in the meaning of 'give in trust'; in the fifteenth it means 'put' (in prison), 'do' (something bad, e.g. murder), and it is not till the eighteenth century that it acquires the speech act meaning of pledging. It is with verbs of this sort that the shift Sweetser notes from sociophysical to emotional and psychological turns out not to be sufficiently all-encompassing. The mental verb meanings of 'assume' and 'observe' are internal, whereas the speech act verb meanings are partly sociophysical (though of course they are psychological and sometimes emotional as well). Strict application of Sweetser's hypothesis of the shift from external > internal meanings would seem to predict the wrong result: that speech act verbs precede mental verbs meanings, but no examples of such a shift have been found in English or in Japanese (Traugott and Dasher 1985).

What can we say about the two meanings of insist? The directive meaning (insist that someone do something) is in a general sense deontic. The assertive meaning (insist that something is the case) is in a general sense epistemic. Some time back I hypothesized that the deontic meanings would precede the epistemic meanings on the grounds that this is generally true of modal verbs in English (cf. Traugott 1985).[1] Thus the may of permission precedes the may of probability, and the must of obligation precedes the must of likelihood.[2] Logicians and some semanticists (cf. Lyons 1982) argue that both the deontic and the epistemic meanings are ambiguous between objective and subjective meanings. Thus He must be married can be argued to be four ways ambiguous:

a) He is required to marry (deontic, objective)

b) I require him to marry (deontic, subjective)
c) It is obvious from evidence that he is married (epistemic, objective)
d) I conclude that he is married (epistemic, subjective)

Given the theory of semantic change I have outlined, we could expect the objective meanings to precede the subjective; we could also expect the subjective deontic to precede the subjective epistemic on the grounds that the tendency is for meaning-changes to become more and more speaker-based (Sweetser treats this shift in modal verbs as a metaphorical mapping from sociophysical to emotional and psychological domains, and here her hypothesis serves her very well). Both the subjective deontic and the subjective epistemic meanings are speaker-based, but the latter are more so since they do not involve the hearer directly, and are entirely focussed on the speaker's sense of what is possible. But where does c), the objective epistemic meaning fit? I submit that the logician's objective meaning is precisely that, a logical meaning. In language use, *It is obvious that he is married* implies obviousness to at least some one person, and this some one person must be the speaker unless otherwise specified (cf. the incoherence of *It is obvious that he is married, but not to me*). So c) can be ruled out in its strictly objective meaning as far as natural language change is concerned (of course, this is a testable hypothesis, and needs to be fully tested).

To return to my hypothesis about speech act verbs, indeed it does turn out that those which have both deontic and epistemic meanings, or more generally non-epistemic and epistemic meanings, acquire the epistemic meanings later. Thus *insist* is attested in the sense of 'demand' in 1676, and in the sense of 'maintain that something is the case' in 1768. Similarly, *postulate* in the sense of 'ask an ecclesiatical authority to admit a nominee (or postulant)' occurs in 1533, in the sense of 'demand' in 1593, in the sense of 'claim the existence of truth' in 1646, and 'claim that something is the case' in 1855. Investigation of *commit* shows that a now-lost meaning was available in the late fifteenth century along with 'put in prison', and 'do'. It was 'charge with office', and as such was a contractual term with affect on the hearer. It conforms to the general expected shift: first 'give in trust' (non-speech act verb) in 1386, then 'put', 'do', and 'charge with office', all in the late fifteenth century, followed by 'pledge (oneself)' in 1799.

Conclusion

It has been my purpose in this paper to focus on the successes of projecting semantic change backward from polysemies. There are, of course, limitations, and not only limitations of the kind that are well known for internal phonological reconstruction. One is that although much of semantic change is unidirectional, some is not. Thus there does not seem to be any way to predict whether up-toning will precede down-toning or vice versa. Another limitation is that, even when semantic change is unidirectional, it very rarely applies to items of the same lexical field at the same time. Thus while we know that words for smell are likely to become pejorative (as witness Old Eng. *stincan* 'smell' > *stink*, and *smell* itself), that spatial terms are likely to acquire temporal meanings, that words for 'precise' are likely to become up-toners and down-toners, and that mental verbs are likely to become speech act verbs, we cannot begin to date the changes. Usually they occur successively through the lexicon, not at the same time. Furthermore, the only rule of semantic change that is claimed to have gone to completion that I know of is Stern's much-cited rule (1968[1931]:189): 'rapidly' > 'immediately' before 1400, but not after. However, since this change is actually yet another example involving greater to less verifiability in the external world, and increasing subjectivity of evaluation, there is no principled reason why it should have come to completion, and may be new instances will occur.

The limitations should not concern us. No one aspect of linguistic analysis can tell us everything. What is important to recognize is that semantic change, an area of language often thought to be rather random, does in fact turn out to be subject to linguistic analysis, and to have predictive power. I have shown that what we know about prospective change from stage A to Stage B can be used to predict change retrospectively. I have also shown that the general processes of meaning extension over time seem to be the same as, or at least a subset of, the meaning relationships posited in theories of polysemy from a sychronic point of view, something totally obscured by appeal to strategies like 'pejoration', 'amelioration', 'specification' and 'generalization', and only partially accounted for by a theory of metaphorical extension of meanings from external to internal domains. Without a synchronic theory of polysemy, we could not do internal reconstruction, because we would have no reason to assume relatedness. Since a theory

that allows an account of two things at the same time is valued more highly than a theory that accounts for only one thing at a time, I have provided further evidence that a synchronic theory of semantics that admits of polysemy is preferable to one that does not.

NOTES

1 The germ of this idea is also to be found in Sweetser 1984.

2 One problem is _can_--the permission sense of _can_ developed later than the possibility sense; it should be noted, however, that the epistemic meaning is later than the ability meaning, which is clearly more referential to the described situation. The permission meaning may have been introduced to establish semantic similarity with _may_ and _must_, which had both deontic and epistemic meanings by the time _can_ developed a deontic meaning (the late eighteenth century).

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