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The Status of Polysemy in Linguistics: From Discrete Meanings to Default Flexibility[1]

0. Introduction

There are three basic ways of looking at polysemy if you are a linguist: (1) you can claim it does not exist; (2) you can see it as a special feature of the semantics of some words (and other morphemes, idioms, constructions, etc.)[2]; or (3) you can assume that it is the default for all of semantics – that it is everywhere.

Most of today's linguists seem to favor the middle way, alternative 2. This is how Bréal began using the term: polysemy is the phenomenon where a word is given a new sense, or signification, so that the old sense and the new one exist one beside the other; the word seems to multiply and produce new examples, similar in form but different in value (Bréal 1897: 154-155). It is

[1] I would like to thank warmly Mona Hennie Markussen, Jan-Ola Östman, Ville Laakso, Sini Maury, and two anonymous referees for insightful and useful comments, and Mark Shackleton for language advice. One of the referees gave me an impressive amount of feedback, for which I am very grateful, though I have not been able to follow all suggestions in full. The shortcomings of this article of course remain my fault alone.

[2] Although I do not see that polysemy would only concern words, I will for reasons of simpler expression refer to the semantics of words in my discussion, because the word has, after all, been the prototypical locus of polysemy in linguistic treatises, and I wish to leave it open whether all claims made in this article about polysemy could be generalized to the semantics of grammatical morphemes, constructions, etc.

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now conventionally acceptable to view polysemy as "one lexeme with several different senses" (Lyons 1977: 550) or "a single word having many related meanings" (Gibbs 1994: 9). Seeing polysemy as a special feature can, however, easily lead to the marginalization of the phenomenon: if you pay attention to the fact that some words are polysemous, then the tacit assumption is that most of the other words (or at least some words) are not polysemous.

Alternative 1 may not be as foreign as it at first may seem; we will look at this possibility below. In at least one way, alternatives 1 and 3 together stand in opposition to alternative 2. While alternative 2 postulates a dualistic distinction between polysemy and monosemy (and thus polysemous and monosemous words), alternatives 1 and 3 treat the possibilities for the semantic value range of words in a more uniform fashion. Hence, whereas alternative 3 suggests that polysemy is the default, alternative 1 does not claim that monosemy is the norm, but rather, that there is no phenomenon by the name of polysemy which would characterize some words.

So-called cognitive semanticists (and cognitive linguists more generally) have made significant efforts to demarginalize polysemy and make advances towards alternative 3. Langacker (1988a: 50-51) argues that "polysemy is the norm for lexical units, and must therefore be accommodated by linguistic theory as a natural, unproblematic phenomenon". Nevertheless, I would like to argue that several aspects of the traditional version of alternative 2 come in through the back door into cognitive-semantic analyses of polysemy.[3]

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[3] Cognitive semantics has developed the understanding of polysemy by paying considerable attention to (i) semantic links between different meanings (including metaphor and metonymy), (ii) the cognitive motivation of these links, (iii) the mental, so-called image-schematic basis of semantics in general, (iv) prototypicality effects and membership gradience, and (v) the varying cognitive salience of different meaning types.

Indeed, programs and practice do not always go together. It is clear that if we look at e.g. the writings of Geeraerts, Lehrer, Cruse, and McLure in Tsohatzidis (ed., 1990), cognitive linguists seem to propose that meanings are vague, that boundaries between meanings are vague, and that the internal organization of meanings should be understood in terms of prototype effects. Nevertheless, when we take a careful look at the actual cognitive-semantic analyses of polysemous words (with Brugman 1981 as the most frequently acknowledged forerunner), they suspiciously resemble dictionary articles and traditional lexical semantics in certain respects. Namely, they seem to postulate systems of discrete (though related), different senses of these words (with indications of semantic relations between these senses). At least implicitly, when such a postulation is carried out, it is also assumed that the individual meaning nodes are by themselves monosemous. In other words, polysemy is seen as the network of monosemous semantic values for one word. From this assumption it is not difficult to deduce that there can be monosemous units and hence we can also find words displaying monosemy. Most cognitive-semantic analyses also create the impression (again implicitly, not officially) of words having a fixed semantic value repertoire, even if cognitive semantics nevertheless emphasizes the role of (subjective) mental imagery in the construction of meaning, and at least programmatically favors a dynamic view of semantics (e.g. Langacker 1987: 376, 381-386).

We have to go to authors like Derrida (1990) to find stronger statements on 'radical polysemy', which I understand to be an extreme instance of alternative 3. Derrida sees the identity of signs through their genealogy and iterativeness so that the value of a word cannot be tied to any particular moment or context, but only to an infinite set of moments and contexts. Therefore, semantics is necessarily non-fixed; signs have flexible significations; there is no monosemy.

Thus, questions of the nature of polysemy tie up with the issue of semantic value in general. If we saw polysemy not only as a normal and unproblematic phenomenon but also as the default of

semantic value, this would not only matter to researchers of polysemy, but also greatly affect general assumptions made in linguistics (and philosophy, semiotics, etc.).

This article is built of 13 sections that each take up one issue relating to polysemy. Each section starts with a thesis which I will call the 'traditional view', and ends in an antithesis which I refer to as the 'alternative view'. These theses and antitheses are generalized, abstract, oversimplified, and extreme. (Some critic might say that they do not exist anywhere as such, which may be true, and I wish to emphasize their illustrative nature.) They cannot be associated with one particular author or school of thought alone, although I find that the 'traditional views' at least partly reflect common assumptions in fields as diverse as lexicography, traditional lexical semantics, formal semantics, and computational linguistics. However, the stance of cognitive semantics may be somewhere in the middle. I will use several quotes from cognitive-semantic literature and show how some of them seem to reflect the 'traditional view' while others are clearly closer to 'alternative views'. The traditional views basically follow from the conventional assumption that polysemy is a special property of some words, while the alternative views build on the 'radical' view that polysemy is the default and the norm.

The main purpose is to offer a dichotomy where thirteen constructed theses and antitheses illustrate opposing views on polysemy. The sections are as follows:

1. How the semantics of a word exists
2. Is there a mental lexicon?
3. Can we talk about semantics?
4. Does polysemy exist?
5. Is polysemy exceptional?
6. Distinct meanings vs. flexible meaning
7. The quantifiability of meanings
8. Polysemy as a classical on/off category?
9. Knowing about polysemy
10. Categorization within polysemy
11. The nature of intersubjectivity

12. Sources and discovery procedures
13. Differing vs. differentiating

We will start (in sections 1-5) with those questions of existence that we discussed in the introduction, and gradually proceed to methodological issues (in sections 6-13). The two types of issues are clearly linked, but they involve different types of discourses: while the first have relevance to any sort of linguistics, the latter mostly pertain to the research practices of polysemy studies.

1. How the Semantics of a Word Exists

Traditional view. Words have meanings that are in an essential sense fixed, given, stable, definite, prefigured, and pre-existing. The basis of this can, of course, be claimed to be social conventions, but even so, linguists can treat social conventions as given and stable. Some words can have only one meaning, which is of the nature described above.

One prerequisite for this view is what many linguists seem to think, namely that there are meanings in the world that wait for the language to lexicalize them. Consider the following:

> It seems reasonable that a category will extend in order to **fill semantic gaps** in the language, i.e. to express **meanings not already conventionally lexicalized**. (Taylor 1989: 120; my boldface)

A proponent of such a view does not seem to take seriously what it means for semantics to be cognitively, socially, and contextually constructed. One way to evade the problematic contradiction between 'minds creating semantics' and 'language having semantic gaps' is to claim that people may have conceptualized certain semantic values, even if they have not verbalized them. This would, however, imply a fairly restricted view on the relationship between language and thought.

Alternative view. If we accept a more radical claim, that 'language constructs reality (for us)', then we cannot assume that

language is something that we cast over the pre-existing, readily conceptualizable world. Rather, conceptualization (through language) gives birth to a semantically value-laden world. If 'language expands', the world expands; i.e., if there are 'new meanings' in language (either via new words or via polysemy), it is language that gives rise to them.[4] They did not exist prior to their verbalization. We create meanings; they are not given to us.

Example. Let us suppose that we introduce the compass to speakers of a language that does not have an expression for it. In the traditional view, we would think that a semantic gap is born and thus the language has to match the new meaning with a new expression or a semantic extension.[5] I wish to suggest that in the alternative view, the givenness of the compass as a conceptualizable entity is questioned. It is rather thought that the compass 'obtains meaning' and thus 'culturally perceived existence' only through linguistic innovations. The essence of the object changes in the process; it is perceived and understood through already existing concepts, and if its function matches some function of an earlier entity, the linguistic usage patterns may lead to the spread of polysemy (of the name of the earlier entity). The compass enters the culture of the new community only after the language of the culture has adopted the new entity.

Thus, words do not have fixed, prefigured semantics that you can 'pointillistically' pin down. Rather, the starting point is flexibility. Meaning emerges in the unique context of situation, and

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[4] Both of my anonymous referees oppose the possibility that language would construct reality (for us – i.e., "as we perceive it" – a specification that they may ignore). One of them suggests that the relationship between language and reality would be more dialogical, while the other gives a more thorough critique, including a note that "the Sapir-Whorf hypothesis has been rejected" and claiming that existence and perception are language-independent and therefore language only reflects reality.

[5] This example comes from one of my anonymous referees as an argument against the claimed contradiction between the different views.

is based on uncertain assumptions, fuzzy default values, and room for variability. We can find reflections of such views in various sources, such as the following:

> the essential **instability of meaning**. [...] ... the *polysemantic* character of human speech ... Like the sense itself, the semantic relationship is essentially *open*. Polysemy will thus make for greater **flexibility** in word-meaning than can be the case in the more rigid domain of sound and form. (Ullmann 1957: 188) [The italics are Ullmann's, the boldface mine.]

> Some vagueness is inherent in every sign." (Weinreich 1966: 178)

> ... there is evidence that sense selection not only selects meanings but creates them, tailoring meaning to context... (Deane 1988: 326)

In particular, assumptions about meaning are born without any definitive feedback about intersubjective agreement between the interlocutors. What we have are assumptions about intersubjective agreement, which are further strengthened or weakened by specific pragmatic parameters. The assumptions about intersubjective agreement over what are considered to be central meanings of words may be stronger than assumptions about mutual understanding of poetic, creative, and 'marginal' uses of words. Traditionally, the problem of subjective differences in semantics has been marginalized by postulating a distinction between 'denotation' and 'connotation'. This distinction is not held up by this alternative view: for one thing, it contains no belief in an objective (or intersubjectively completely agreed-upon) 'denotation'; in addition, even 'associative meanings' can be socially constructed and distributed and thus at least partly common to many people.

2. Is There a Mental Lexicon?

Traditional view. 'Meanings' are cognitively stored entities that a linguist can look for. In fact, we have a 'mental lexicon' where

different senses are 'stored' and 'accessed' in a similar way as in a printed lexicon. Implications of this view are still very much live in e.g. psycholinguistics, though these illustrative quotes come from slightly older sources:

> We use 'dictionary' with systematic ambiguity to refer both to an internalized mental repository of lexical knowledge and to the usually alphabetical collection of words and their definitions. (Caramazza & Grober 1976: 201 fn 1)

> ... the lexical entry of a preposition in the mental lexicon, which we shall assume resembles a standard dictionary. (Colombo & Flores d'Arcais 1984: 53)

Descriptions of experimental settings freely exploit the mind-as-a-machine metaphor:

> ... a subject assigns a rating by first computing a distance value between the specific sense-instance and the core meaning, and then mapping this internal metric onto the experimental scale. (Caramazza & Grober 1976: 188)

> ... subjects tend to give lower acceptability ratings to sentences that require a longer search through the stored list of senses. (Caramazza & Grober 1976: 189)

Alternative view. Although it can be supposed that 'meanings' in some way or another may also exist through cognitive representations in speakers' minds, their representational status is very problematic. Metaphors of mental lexicon usually derive from the persistent mind-as-a-machine analogy, which some branches of cognitive science (such as connectionism) are gradually abandoning. Dominant theories of cognitive psychology in the 1980's have supported the metaphor of cognition as a 'storage' of e.g. linguistic information (with linguistic processes understood by means of 'access' to and 'retrieval' from that storage), while some connectionistic models would rather see cognitive processes as dynamic patternings and spreading activation in a distributed neural

network. In this process, we form abstract, flexible models (i.e., schemata) on the basis of the usage events. This understanding of cognition via concepts of neural networks and flexible schemata is quite different from the storage model (e.g., mental lexicon), although cognitive psychology can by no means claim having established solid evidence to support either model.

For a semanticist interested in the workings of cognition, a fairly high level of abstraction is probably sufficient in the conceptual framework. Neurophysical 'realism' does not imply descriptive accuracy for semantic description. When polysemy studies refer to 'senses' or 'meanings' of words, these entities should be allowed to exist as methodological tools with no definite commitment to an ontological-physiological reality. This could account as a defence for cognitive semantics whose 'cognitive commitment' (cf. Lakoff 1990) does not usually result in experimental research on the workings of cognition.

3. Can We Talk About Semantics?

Traditional view. Although talking about the semantics of a polysemous item can be difficult, we can still do this, because we have to. The means can be minimalistic, if needed, for instance for lexicographical purposes.

This assumption is the cornerstone of descriptive linguistic semantics as well as lexicography, although the latter manifests the assumption more explicitly. Dictionaries attempt to capture the meanings of words by very minimalistic means, and many linguists seem to accept the idea that dictionaries are a source for finding out about the semantics of a word. Semantic analyses of a more theoretical nature also create the impression of having produced 'final' and 'authoritative' descriptions of semantic value.

Alternative view. The ultimate impossibility of talking about semantics must be taken seriously. We cannot escape the circle of language as metalanguage. However, we can attempt to work on semantic descriptions by maximalizing both the range of different metalanguages used in a parallel manner, and the volume of

explanations. The use of multiple channels and representations as well as the richness of detail will enhance the approach towards fuller understanding of semantics, even if there are no objective measures to witness such 'scientific progress'. We may also need to incorporate the notions of fully-fledged encyclopedic knowledge and holistic cognition in this endeavor. But even more importantly, such descriptions respect the principle of flexibility and also allow for alternative descriptions and interpretations. I believe that cognitive semantics tries to follow this principle.

4. Does Polysemy Exist?

Traditional view. Because of the traditional views presented in sections 1 and 3, polysemy exists. It exists through a fixed semantic system which we are all aware of, and we can also grasp it.

To digress away from the traditional view, it is possible to question the very existence of polysemy. One of the most important alternatives that enables us to do away with polysemy is to regard all semantic variation in the use of a linguistic item as deriving from changes in the co(n)text.[6] That is, words would not change their meaning from one instance to another, but rather, their meanings would become more specific in different ways as an outcome of the spreading influence of the neighboring words, which would affect them differently in different cotexts. Then the word's 'own meaning' would be something that was very much reduced and general. This seems to be a dead end, because we must suppose that neighboring words fill up the unspecified slots in the semantics of a polysemous word, so that these words should then have richer contents than what we are supposing for each individual

[6] This comes close to generative-semantic analyses with highly abstract core meanings and production rules. Some analysts ('autonomists') assumed a meaning nucleus that was context-independent, while others ('contextualists') claimed that all meaning is derived from the context. (Caramazza & Grober 1976: 186)

word. Words in the cotext are allocated semantic contents that words should not have.[7]

Few linguists would deny the existence of polysemy today. As for non-linguists, the phenomenon is less evident, but language comparisons on the one hand and dictionaries on the other suggest its existence. As Lakoff (1987: 416) puts it, "the senses are related, often in such a close and systematic way that we don't notice at first that more than one sense exists at all." Experience with more than one language is probably the most important source of evidence for the average speaker's explicit realization that polysemy exists. This is because the semantic 'territories' of words in different languages do not usually fully match, but rather coincide and intersect quite unpredictably. What about monolinguals without exposure to other languages, then?

I have tested this in the United States in 1994, when I performed an experiment in which informants had to fill in questionnaires dealing with the polysemy of a given word (for an introduction of the method, see Raukko 1997/in print). First and foremost, they had to produce – with no leading instructions or previous training – examples of a word that would suggest (or 'portray') different meanings. It seems that my American informants, most of them practically and many of them actually monolingual, were in fact able to bring their implicit knowledge about polysemy to a more explicit level. Some informants witnessed that they had not realized the existence of the phenomenon before, but did so during the experiment. Hence the results of my investigation show that polysemy is a real, if not explicitly familiar, phenomenon from the native speaker's point of view.

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[7] In fact, contextual selection works the other way round: in the combination of two richly polysemous words (such as *get* and *back*) the words bilaterally limit each other's possible polysemy, though we must still accept that *get back* as a collocation is also polysemous (e.g. 'return' and 'retreat'), which is partly due to the fact the 'selected' meanings of *get* and *back* are flexible.

Alternative view. Because of alternative views discussed in sections 1 and 3, it is a debatable question whether polysemy 'really' exists, but rather than worrying about that, we should seriously pose the opposite question: Does monosemy exist? The following section will continue this train of thought.

5. Is Polysemy Exceptional?

Traditional view. Polysemy is a marked property of a word's semantic value, worthy of a special term and special attention. As perhaps not the least important indication of this markedness, the complementary term *monosemy*, cf. 'lack of polysemy', is a less frequent term mainly devised for the purposes of polysemy research as a negative counterpoint.[8]

If we accepted such notions as markedness and unmarkedness in this context, and if we then believed that marked phenomena more easily acquire labels than do unmarked phenomena, then the unmarked situation would be that there is one meaning for one form in language. At face value, there may be nothing dubious in the idea that it would be natural for forms and their meanings to be in a 1:1 relationship; see e.g. Bolinger (1977). From this perspective polysemy *would* be a marked phenomenon, worthy of a specific label – and worthy of specific 'pathological' semantic inquiries – at least if we understood it as distinctly stored meaning units.[9]

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[8] I am using the concept of markedness here as a meta-device without taking a position on the ontological reality of the concept or its political echoes.

[9] Note that the 1:1 principle can be understood as supporting the view of polysemy as flexible meaning (discussed in the next section). In this interpretation, one form represents one coherent category, which can itself cover a wide semantic territory. There are several other ways to understand the principle; for instance, that speakers aim at such a principle but never meet it; or that there is an abstract core meaning which gets specified in contexts (cf. section 4); or that people explicitly think that monosemy is the norm but implicitly have no trouble dealing with polysemy.

As already mentioned, cognitive linguists have noted that in fact it can be seen as more typical for words (and morphemes in general) to have several meanings than to have just one. More generally, the benefits of polysemy are acknowledged.

> ... polysemy – the product of metaphorical creativity – is essential to the functioning of languages as flexible and efficient semiotic systems. (Lyons 1977: 567)

However, when linguists explicate the motivation for the development of polysemy, they run the risk of making hasty assumptions about the structure of cognition.

> Polysemy is in all probability a semantic universal inherent in the fundamental structure of language. The alternative to it is quite unthinkable: it would mean that we would have to store in our brains a tremendous stock of words, with separate names for any possible subject we might wish to talk about; it would also mean that there would be no metaphors and that language would thus be robbed of much of its expressiveness and flexibility. (Ullmann 1966: 232)

Explanations of this kind easily assume that there are meanings in the world waiting for lexicalization (cf. section 1) and that there is a mental lexicon which has a limited capacity (cf. section 2). It is often claimed that it is cognitively easier and more economical to use one form for several functions and/or meanings and to learn novel uses for familiar forms than to learn new forms. What is more, we understand (and create) new concepts through old ones, not only through syntagmatic association, but also via polysemy; cf. Lakoff's (1990) claim that most if not all abstract reasoning is based on image-schemas which again are the product of our perspective on the world as bodily creatures in a physical environment.

Alternative view. It is characteristic of language that categories are flexible. A literal interpretation of the 1:1 principle, that a word should have a fixed meaning and only one meaning, would be quite odd. Therefore polysemy is expected, not exceptional. Monosemy

is not just exceptional, but improbable. It is available as a theoretical option, or perceivable from a methodological viewpoint, such as the practical needs of a dictionary.

6. Distinct Meanings vs. Flexible Meaning

Traditional view. Polysemy means that a word has distinct, discrete (though related) different meanings. This is an addition to or a special case of the view presented in section 1, so that the characteristics of semantic fixedness are carried over from the original one meaning to these different meanings.

Cognitive linguists do not explain why it would be necessary for a word to have a countable set of different meanings if the other alternative is that we can see meanings as *flexible*. The following quote reflects a typical view:

> Nobody ever denied that polysemy exists. Words have distinguishable, related senses... (Annette Herskovits on *Cogling* 16 Nov 1995)

Alternative view. Polysemy can be seen from the notion of **flexible meaning**[10] instead of seeing it as a set or network of different, discrete meanings. These two views can be taken as complementary perspectives on polysemy, or more extremely, a view of different meanings can be substituted by a view of flexible meaning.

Polysemy as flexible meaning refers to the idea that the semantic value array of a word is seen as a mass-like entity, or as a contingent range, which of course allows for heterogeneity e.g. in

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[10] I use this term in a slightly different manner from *meaning flexibility*, which is often used to describe an attitude to semantics which, in a broader sense, is compatible with my view of polysemy as flexible meaning. E.g. in the conversation-analytical framework meaning flexibility is linked to such a phenomenon as *meaning negotiation* – the way in which speakers communicate on the basis of the fluctuability and indeterminateness of the semantics of a piece of conversation.

the form of varying (proto)typicality. In contrast, the view of distinct meanings sees polysemy as a countable entity, traditionally a list, more recently e.g. a network consisting of separate nodes (Langacker 1988b). Figure 1 illustrates the difference with a visual metaphor.

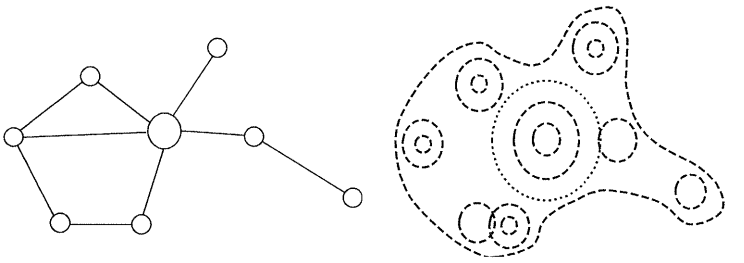

Figure 1. Distinct meanings vs. flexible meaning.

I would like to argue that although the cognitive-semantic program in principle favors a view such as portrayed on the right in Figure 1, concrete analyses all too often suspiciously remind one on the left side in the figure.

The decision between distinct meanings and flexible meanings makes a difference in how linguists can quantify polysemy (as discussed in the next section); quantification can of course either relate to counting the number of meanings or to assessing the 'width of semantic value array', but the latter way to quantify polysemy seems to be inherently much more metaphorical. Thus the flexible meaning view is less restrictive when e.g. making hypothetical comparisons of the 'degree of polysemy' of different words. What is more, the choice of the view of distinct meanings more easily manifests itself in a plea for strict category boundaries between monosemy and polysemy; (cf. section 8), whereas flexible meaning is more compatible with the radical view that polysemy is the default.

One of the most important arguments in favor of a flexible meaning view, as opposed to a view of different meanings, is that it is usually quite artificial to separate different meanings, or nodes in

a meaning network from one another. It is not only a methodological decision what counts as a meaning type; it should also be noted that the repertoire of instances is continuum-like and there is an infinite number of distinguishable meanings because there are miscellaneous cases between nodes. Nodes can be seen as prototypes, and between these there are less prototypical cases – e.g. ambivalent instances that form 'paths' and 'watersheds' between the nodes. Because the meaning difference is hardly noticeable between two close cases, we cannot say that all instances of a word represent different meanings, and yet if we want to establish some set of prototypical different meanings, it is always arbitrary to break the continuum somewhere in the middle. Even if cognitive-semantic analyses programmatically appreciate and exploit prototype theory, it seems that they do not follow to the heart of the matter the idea of prototype categories allowing for membership gradience (cf. flexibility) and continuum categories (cf. fuzziness of category boundaries).

Cognitively, it would be suspicious to think that distinct meanings of one word are stored in the mind distinctly, because some recent schools of cognitive sciences have emphasized the role of flexibility and distributed representation in cognition more generally (see e.g. Hinton, McClelland, & Rumelhart 1986). The simple existence of form identity guarantees the fact that not only would speakers perceive links between different meanings of a polysemous item, but they also start from the (folk theoretical) assumption that one form conveys one meaning.[11] It seems easier to

[11] In fact, if there is any truth in the idea of a mental storage, it is more likely that such an organization would go by forms rather than by meanings or senses, for forms are intended to be more distinct and distinguishable in linguistic processing than meanings, which are rather created in the situation. – This would again mean that in fact there would be no clear boundary between homonymy and polysemy. Because this distinction is, however, one of the cornerstones of the idea of polysemy as flexible meaning (i.e., homonymy does not represent flexible meaning of one form), my anonymous referee suggests that the 'traditional' and 'alternative' views are not

accommodate the 1:1 principle to the flexible meaning view than to the distinct meanings view.

The question about different meanings vs. flexible meaning is very important both ontologically (e.g. when we start to speculate on the cognitive representation of polysemy) and methodologically (when we produce our linguistic analyses).[12] It does not only affect linguistic views on polysemy but has wider consequences concerning the way linguists perceive the ontology of signs and even the ontology of language.

7. The Quantifiability of Meanings

Traditional view. We can compare the degree of polysemy of different words. We can also count the number of senses of a word.

Even cognitive linguists like to quantify polysemy. They often talk about the number of meanings and compare the degree of polysemy of different words; consider (with my boldface)[13]:

> In the following, I will illustrate the approach on what is perhaps **the most polysemous** of the English prepositions, *over*. (Taylor 1989: 110)

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contradictory but complementary, which I am glad to accept especially in this very context.

[12] The question of whether cognitive linguistic analyses on polysemy have so far revealed anything about actual conceptual representation was recently (November 1995) discussed on the *Cogling* electronic mailing list; the main trigger was Sandra & Rice (1995), which uses psycholinguistic techniques in order to study the cognitive reality of polysemy networks. It became evident that there is both disagreement on and lack of clarity about the nature of the connection between linguistic practices and assumptions about cognitive representation. It is still quite difficult to perceive, on the basis of cognitive semantic analyses, what it means cognitively to say that a word "has meanings", or that a language user assigns several semantic values to one linguistic form.

[13] In the citations, Lakoff, Gibbs, and Caramazza & Grober also interestingly equate sense with **use**; this topic would again deserve lengthy discussion.

> Brugman's study is an extended survey of the highly complex network of senses of the English word *over*. It **covers nearly one hundred kinds of uses**. (Lakoff 1987: 418)

> The three 'main meanings' of *a paper*, i.e. ... (Taylor 1989: 105)

> 35 different **uses** of *stand* were printed on 3×5 cards, one **sense** per card. (Gibbs & al. 1994: 239)

Such a view goes against most of the alternative assumptions I wish to suggest in this paper. Although the following authors use the argument for quite different purposes (i.e., to defend a generative position using construal rules), it is worth citing:

> ... the actual number of senses cannot be determined: we can always construct a new sentence context such that a word will have a new though perhaps only very slightly different sense. (Caramazza & Grober 1976: 188)

Alternative view. Quantifying polysemy is problematic. If we accept the view of polysemy as flexible meaning, it becomes awkward to assume that meanings are separable and countable.[14] And if we accept the view that semantics does not exist as concrete values or cognitively stored packages, but is rather a dynamic construct created intersubjectively during language use, comparing the degree of polysemy is also quite difficult.

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[14] Here the point is not that every usage event represents a different meaning, if we go into enough detail. Rather, it is significant in semantic research that people do abstract and generalize meaning types, but I claim that there are both intersubjective differences and similarities in this categorization, as well as differences depending on the perspective and level of analysis (e.g. intuition vs. introspection).

8. Polysemy as a Classical On/Off Category?

Traditional view. Either a word is polysemous or it is not. This view is present in the quotations in both the previous and the following section, and even if cognitive linguists may problematize the process of finding the different meanings, they imply that a clear distinction exists:

> Even though the distinction between monosemy and polysemy is in principle clear enough, it is in many cases tantalizingly **difficult to decide if** two uses of a linguistic form instantiate two different senses, **or** whether they represent two exemplars, ... (Taylor 1989: 100)

Alternative view. A weak version: there is no definite borderline between monosemy and polysemy. A strong version: no monosemy exists, so we do not need to establish a borderline.

9. Knowing About Polysemy

Traditional view. It is easy to know if words are polysemous or not. And as follows from sections 7 and 8, it is easy to know how polysemous words are if they are polysemous.

> Polysemous words, such as *stand*, are pervasive in language (e.g. **97** out of the [100] most frequent **words** in English **are polysemous**). (Gibbs & al. 1994: 232)

Nunberg is more pessimistic:

> ... there are virtually no words [...] for which we can 'give the meanings'; while we can be assured that only one of the uses of the word can be conventional, we have no empirical grounds for saying *which* use it is, since exactly the same pattern of use would be generated under any of several analyses. (Nunberg 1979: 174)

Alternative view. It is not easy to know whether a word is polysemous or not, unless we accept alternative 3 (at the outset) at its extreme and start from the assumption that all words are

basically polysemous. If we accept this assumption, then we can accept the possibility of degrees of polysemy, although it is not easy to find out about such properties.

10. Categorization Within Polysemy

Traditional view. A linguist can (methodogically) differentiate meanings from one another. This is easy because the different meanings themselves (ontologically) readily offer plausible distinctions.

Alternative view. It is very difficult to differentiate meanings from one another. For one thing, we need to realize that categorizations within polysemy can be 'ontological' or methodological, 'realistic' or 'imaginary', and the purpose of categorization produces different solutions. If we want to establish semantic distinctions within polysemy, we need to ask to whom they matter. A maker of a bilingual dictionary will want to concentrate on such points in the polysemy of a word that are potentially difficult for the foreign-language speaker who uses the dictionary. A non-linguist will notice such semantic distinctions in the polysemy of a native-language word that come up in verbal humor and puns. In my own research (e.g. Raukko 1997/in print), I have been using non-linguists' intuitions as evidence for significant meaning differences in the polysemy of a word.

11. The Nature of Intersubjectivity

Traditional view. Semantics is neither objective nor subjective – it is intersubjective. But many social conventions are norms that every native speaker knows how to follow. Similarly, polysemy is basically the same for all (normal) speakers. ('Intersubjective' could be seen, in this view, as just another name for 'objective'.) There is an intersubjective consensus about the distinguishable meanings of a polysemous word.

Alternative view. Semantics is intersubjective, and intersubjectivity (= a significant degree of shared conventions,

based on socialization and interaction) allows for subjective differences, flexibility, and fuzziness – as well as for polysemy. There are assumptions rather than knowledge about intersubjective agreement.

Differences between speakers must not be overlooked; rather, they must be made an essential part of research. It is also true that differences between speakers in a test situation can interestingly correlate with intersubjectively more salient and less salient characteristics in a word's polysemy. Concretely, in an experimental setting where informants are asked to produce semantically different instances of a polysemous word, a meaning type that all informants come to think of is probably more salient than one that only a few produce.

12. Sources and Discovery Procedures

Traditional view. Because polysemy is basically the same for all normal speakers, any linguist or lexicographer can find out the set of different meanings on her/his own. Hence, using one's intuition is a reliable method for polysemy research. One can also look at a corpus and classify the instances of a word that one finds there into categories that are based on what one sees in the cotext – through the filter of one's intuition.

Alternative view. Any linguist – as a speaker – always has a skewed view of polysemy.[15] Therefore polysemy research benefits greatly from experimental methods. We cannot find semantics in a corpus, because semantics has to do with the interplay of language, minds, and common context. Semantics is produced by interpreters, who cannot be present in a corpus, at least as we understand corpora at present.

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[15] And even if linguists were to co-operate and together formulate compromise hypotheses, they might still have little to do with non-linguists' perceptions (or **explicit semantic knowledge**) and speakers' cognitive properties (or **implicit semantic knowledge**).

Some cognitive linguists have admitted that analyses are subjective and differ from one another, and that this very feature of intersubjective disagreement is worth paying attention to:

> A mature model of family resemblance categories needs to have at its disposal some principled means for deciding between alternative descriptions. [...] my account of *over* does not accord in every detail with Brugman and Lakoff – on what basis do we prefer one description rather than the other? (Taylor 1989: 121)

> The crucial element in the discussion of these facts is what criteria you want to use to distinguish between different meanings – and one of the difficulties springs from the fact that there are quite a number of diverging criteria around. (Dirk Geeraerts on *Cogling* 30 Nov 1995)

13. Differing vs. Differentiating

Perhaps contradictorily on the surface, even if I propose a view of flexible meaning, it does not mean that it would be methodologically senseless to look for 'different meanings'. This is because a view of flexible meaning is not in contradiction with the idea that the meanings of different instances of one word differ from one another semantically. We just have to acknowledge that idealized meaning types and realized meaning instances are two different levels of linguistic representation. Speakers use words flexibly, while analysts categorize the instances into more or less neat boxes. Speakers may also have schemas of possible ideal uses of words in their cognition, and it is possible to grasp part of this semantic knowledge.

In other words, if we perform experiments where informants are asked to produce semantically different instances of a polysemous word, we have to keep in mind that the informants do not provide us with a complete categorization of a word's multiple meanings, but instead, they give us some general sense of meaningful distinctions within polysemy – which is flexible in nature.

Thus: the semantic values of a word in different co(n)texts do differ from one another; we can even differentiate these meanings from others and make hypotheses of differentiable meaning types; but this does not lead to the conclusion that we have established distinct meaning types.

14. Discussion

I have discussed a set of fundamental assumptions about polysemy by constructing two opposing lines of thought, the 'traditional view' and the 'alternative view'. General assumptions about the status of polysemy and the nature of semantic value were presented in sections 1 through 5, while sections 6 through 13 concentrated on methodological issues pertaining to the concrete research on polysemy. Yet the latter should be seen as methodological consequences of the former assumptions. Although I have wished to avoid defaming the traditional views on polysemy, it is clear that I have tried to present the alternative views as positive and appealing. Therefore my perspective on what I consider as the traditional views may well be overcritical, and vice versa, I may have an idealistic and rosy picture of the alternative views.[16]

Why do I favor these alternative views? Some sceptic could undermine my endeavor to upgrade polysemy to being the default of semantics by noting that people occasionally see the object of their personal interest as more global than it really is. I defend my view by claiming that empirical work with polysemy has made me realize that extreme monosemy is very unlikely. Moreover, concrete problems of describing the semantics of polysemous words have reinforced my preference for fuzzy and flexible notions of semantics over clear-cut and fixed ones. Similarly, dealing with

[16] It must also be repeated, to follow the advice of the anonymous referees, that the opposing views are presented as oversimplified and artificially distinct – against the ideas presented in the alternative views [!] – and they could be taken as complementary perspectives, too.

informants' responses has been revelatory so that intersubjective differences have found their way into the analysis, and a view of flexible meaning has seemed more appealing than a view of discrete senses. Thus, ontological assumptions and methodological solutions can have a bilateral relationship.

It is noteworthy that cognitive semanticists have started to realize the problematicity of choosing an appropriate description of a unit's polysemy. For instance, as we saw, Taylor (1989: 121) notes differences in his and others' analyses of *over* (and sets the floor for a discussion about the differences of plausible tools vs. less plausible tools), and Sandra & Rice (1995) take up the task of psycholinguistically testing hypotheses about polysemy structure. In so doing, they follow the path taken by relatively early instances of the use of psycholinguistic methods in the research of polysemy (Lehrer 1974, Caramazza & Grober 1976, Colombo & Flores d'Arcais 1984).

All in all, we can conclude that cognitive linguists often (at least programmatically) propose ideas presented here as 'alternative views', but in their practical analyses there are still traces of some of the traditional views.

I have treated polysemy on a general level, as a general topic of interest some crucial aspects of which are relevant to all of linguistics. In fact, I argue that background assumptions in the research of polysemy are generalizable to a much wider audience than those who explicitly study polysemy, and therefore by talking about them we simultaneously talk about background assumptions in linguistics. Not only are the implications for principles of categorization highly generalizable; even more importantly, if polysemy is the default of semantics, then most linguistics has to take the general principle of flexibility much more seriously than before.

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