JUSTYNA GRUDZIŃSKA (WARSZAWA)

POLYSEMY: AN ARGUMENT AGAINST
THE SEMANTIC ACCOUNT

Faced with the multiplicity of meanings of natural language expressions, Grice and his followers offer pragmatic accounts in terms of generalized conversational implicature. Words tend to have simple and unitary senses, together with an unstable, context-specific pragmatic overlay (namely a set of generalized conversational implicatures). In his paper 'Overlooking conventions. The trouble with linguistic contextualism', Michael Devitt suggests that the polysemy-account is a viable *semantic* alternative to the Gricean implicature-account. However, polysemy has shown itself to be a serious theoretical challenge, and there is nothing close to an agreement as to what polysemy really is and how it should be analysed. In this paper, I argue that making polysemy a matter of semantics (rather than, say, subsuming it under the phenomenon of meaning modulation in contexts of use) blurs the distinction between the semantic and pragmatic. As a result, Devitt's semantic alternative is dangerously likely to lead, and in fact has led lexical semanticists to 'Meaning Eliminativism', the view that 'there is no such thing as 'the meaning of a word' in isolation from particular contexts' (Cruse 2000).

INTRODUCTION

Natural language is known for the ambiguity of its expressions. Ambiguous expressions constitute a case study for the distinction between semantics and pragmatics. The question is whether the various readings are encoded by the semantic component of a linguistic theory or maybe rather a single interpretation is encoded semantically, leaving pragmatic factors to generate the other interpretations in context. For example, consider the following two sentences:

(1) The capital of France is Paris and the capital of England is London.
(2) She gave him the key and he opened the door.

The two senses of 'and' in (1) and (2) are different. In (1) 'and' seems to have a standard truth-functional sense (both conjuncts are true); in (2) it seems to mean 'and then' (logical sense plus a notion of sequentiality). Faced with the multiplicity of meanings of natural language expressions, Grice (1975) and his followers offer pragmatic accounts in terms of generalized conversational implicature. The word 'and' is not ambiguous between the two meanings. It has a simple, unitary

sense (the standard truth-functional sense), together with an unstable, context-specific pragmatic overlay. For example, the 'and then' sense of 'and' in sentences like (2) is a product of a generalized conversational implicature due to the maxim of manner 'be orderly' (our expectation that events are recounted in the order in which they happened).

In his paper 'Overlooking conventions. The trouble with linguistic contextualism', Michael Devitt suggests that the polysemy-account is a viable *semantic* alternative to the Gricean implicature-account:

> We should always be on the lookout for polysemy. The pragmatists have drawn attention to hitherto unnoticed examples of the context contributing to the content of messages. Perhaps many of these are cases of polysemy, cases of words with several related senses. Where one is, the context's contribution is one of disambiguation… it is a semantic property not a pragmatic one (Devitt 2011: 36).

> I wonder whether all the standard examples of alleged generalized conversational-implicatures – 'or', 'not' … - should be similarly treated as semantic … I concluded the last section with the thought that we should be on the lookout for polysemy in pragmatists' examples of context contributing to messages. I think we have found some in the alleged generalized conversational implicatures considered in this section ['some' and 'and'] (Devitt 2011: 37).

However, polysemy has shown itself to be a serious theoretical challenge, and there is nothing close to an agreement as to what polysemy really is and how it should be analysed. In my paper, I will argue that making polysemy a matter of semantics (rather than, say, subsuming it under the phenomenon of meaning modulation in contexts of use) blurs the distinction between the semantic and pragmatic. As a result, Devitt's semantic alternative is dangerously likely to lead, and in fact has led lexical semanticists to 'Meaning Eliminativism', the view that 'there is no such thing as 'the meaning of a word' in isolation from particular contexts' (Cruse 2000: 51).

POLYSEMY: THE PROBLEM OF DEFINITION

Traditionally, polysemy is distinguished from homonymy. In homonymy the different meanings encoded by a single linguistic form are unrelated, e.g. the English form 'bank' may refer to a financial institution or a riverside. In polysemy the different senses of a single lexical item are seen as being related in some way, e.g. the word 'run' takes on different meanings depending on whether we are talking about 'running a marathon', 'running some water', 'running a shop, 'running on gasoline'. A second, and more crucial to our concerns, distinction is one between polysemy and generality (indeterminacy).The distinction is between those aspects of meaning that correspond to multiple senses of a word (those aspects that are part of the underlying semantic structure of the item)

and those aspects that are contextual modulation of a single general meaning (pragmatically adjusted lexical meanings). For example, 'run' is considered ambiguous between the various readings, while 'cousin' is not ambiguous between the two readings: 'male cousin' and 'female cousin' - it is general as to the dimension of sex. Corresponding to the distinction between ambiguity and generality, there is a distinction between the two ways in which the meaning of a word form interacts with the context. Selection involves the activation by different contexts of different senses associated with ambiguous word forms. In the process of contextual modulation a single sense of a general word can be modified in a number of different ways by different contexts.

Whereas homonymy provides a clear case of semantic ambiguity, the semantic status of polysemy remains controversial. A number of diagnostic tests have been proposed for distinguishing between polysemy and generality (indeterminacy). However, all these tests have shown themselves to be problematic. One group of tests are the logical tests originally introduced by Quine (1960). On the simplest version of the logical test, if an utterance involving a word can be both true and false of the same referent, then the word is polysemous, e.g. 'The feather is light and not light' is possible because 'light' has two senses 'not heavy' and 'not dark' (example from Quine 1960: 129). No parallel possibility obtains in the case of general terms, e.g. * 'The subject of this poem is and is not a monarch' – this sentence cannot be taken to mean 'The subject of this poem is a queen, but not a king' (example from Cruse 1986: 61).

Another important group of tests is linguistic (Zwicky and Sadock 1975, Cruse 1986). One class of linguistic tests relies on the fact that independent senses cannot be brought into play simultaneously without oddness – contexts which do activate more than one sense at a time give rise to what linguists have labelled zeugma. For example, zeugma results in coordination: 'John and his driving license expired last Thursday' and in anaphoric constructions: 'John's driving license expired last Thursday; so did John'. A general term does not give rise to zeugma: 'My cousin who is pregnant was born on the same day as John's, who is the father' – the context makes it clear that the two cousins are of different sexes, but the sentence is not zeugmatic. The identity test is another example of linguistic tests. It relies on the fact that sentences containing two (or more) occurrences of polysemous words prohibit what is termed the crossed interpretation. For example, 'Mary is wearing a light coat; so is Sue' does not have four interpretations, but two only – either both women are wearing un-dark coats, or both are wearing un-heavy coats. General terms allow crossed interpretations: 'Mary has adopted a child; and so has Sue' – four possible distributions of sexes are compatible with this sentence.[1]

The third test is definitional (Geeraerts 1993: 106-107). A word is polysemous if a single set of necessary and sufficient conditions cannot be provided to

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[1] All the examples come from Cruse 1986.

cover all the senses expressed by the word, e.g. the word 'light' is polysemous, because there is no unified definition of the meaning of 'light' which encompasses both senses 'not-heavy' and 'not-dark'.

Cruse (1986) and Geeraerts (1993) point out to different problems with the tests. They show how the different tests may yield contradictory results, and how their outcome can be easily manipulated by context.[2] First, different tests make conflicting predictions when compared to each other. For example, 'newspaper' is not polysemous according to the linguistic test because both senses ('the people heading the organisation' and 'the printed object') exist in sentences like 'The newspaper decided to reduce its size'. However, it is polysemous according to the definitional test since we cannot provide a single definition to cover all of its senses (Geeraerst 1993: 115). Furthermore, the outcome of the tests can be manipulated by the context, e.g.: 'Kim's thesis is orange and unreadable' indicates polysemy for 'thesis' ('physical object' versus 'abstract content') according to the linguistic test, but the slightly modified 'Kim's thesis has thousands of pages and is quite unreadable' is fine – this should indicate that there is a lexical entry for 'thesis' that is general between physical object and content. Also, there are contexts that appear to be able to bridge the gap between widely divergent meanings, e.g. explicit comparisons: 'The giant put his arm into that of the ocean' is markedly more zeugmatic than 'The arm of the ocean resembles that of a giant' (Geeraerts 1993: 122).

A closer examination of tests shows that no operational definition of polysemy exists. Geeraerts also points out a fundamental difficulty with the definitional test: the indeterminacy of a word may hide in the indeterminacy of the words used to define it. For example, Wierzbicka (1990) defines 'bachelor' as 'a man who has never been married thought of as a man who can marry if he wants to'. As Geeraerts observes, in Wierzbicka's definition the word 'can' preserves the polysemy between the sense of permission and the sense of physical possibility. The author is pessimistic about the possibility of defining methodology for ensuring that only monosemous words are used in definitions (Geeraerts 1993: 130-131).

POLYSEMY: SEMANTIC OR PRAGMATIC PHENOMENON?

In the first part of this paper, I offered a brief survey of the well-known problems with the definition of polysemy. In the second part of the paper, I will make an attempt to answer the following question. Given what we know about polysemy, should we classify it with semantic or pragmatic phenomena? The table below lists features that can be taken to be the indications of the presence of a semantic/pragmatic phenomenon:

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[2] See also Ravin and Leacock 2000.

SEMANTIC	PRAGMATIC
CONVENTIONAL	NON-CONVENTIONAL
LANGUAGE-PARTICULAR	UNIVERSAL
ARBITRARY AND UNPREDICTABLE	MOTIVATED AND PREDICTABLE
DETERMINATE	INDETERMINATE

In the course of discussion, I will provide reasons for some resistance towards treating the multiple senses of polysemous words as governed by separate semantic conventions.

CONVENTIONALITY

Semantic meanings are conventional and stable (across contexts). Pragmatic meanings are interpretations that arise out of contexts – they are variable to a greater or lesser degree. In his paper, Devitt takes 'convention' to involve 'mutual understanding', 'implicit agreement'. As he defines it, convention is an "accepted" way to express the meaning of a word in a given community (Devitt 2011: 28-29). However, cross-dictionary comparisons and the results of experiments with linguistically naïve speakers show that there is no agreement among proficient speakers in dividing the semantic contents of polysemous words into distinct senses.

Dictionaries differ in the number of senses they define for polysemous words, their grouping into sub-senses and semantic contents:

> A look at the entries for polysemous words in different dictionaries shows that lexicographers cannot agree on how to divide up the semantic space covered by a polysemous word; dictionaries disagree with respect to the number of senses and subsenses and with respect to the way these senses are distinguished (Fellbaum 2000: 52).

The similar disagreement about the semantic contents of polysemous words can be observed with linguistically naïve speakers' judgments. Fellbaum et al. (1995) asked speakers to select the appropriate dictionary sense for polysemous words – they showed considerable disagreement both with each other and with the control group of experienced lexicographers.

UNIVERSALITY

Conventional meanings are language-particular. Pragmatic meanings are based in general mechanisms, and we expect them to appear universally. It seems that polysemous words with the same patterns of meaning appear in many

languages. Fillmore and Atkins used the 'network' method of describing word meaning to compare the 'crawl' sentences and sentences containing 'ramper'.[3] The comparison of the 'crawl' network and the 'ramper' network showed considerable semantic overlap:

> … both verbs may be used to describe the primary motion of insects and invertebrates, and the deliberate crouching movement of humans; both may be applied to the growth of plants gradually extending over a surface; and both may be used pejoratively to refer to the way in which someone shows a servile attitude towards someone else (Fillmore and Atkins 2000: 104).

Geoffrey Nunberg makes a similar point:

> … I know of no language in which the same form is *not* used to refer to newspaper companies and newspaper publishers, or window-holes and window-glass, or game-activities and game-rules. And this should make us wary of saying that these regularities *could* be otherwise, which is a prerequisite for saying they are conventional (Nunberg 1979: 148).

ARBITRARINESS

Homonymy, a clear case of semantic ambiguity, is an arbitrary, unmotivated and unpredictable phenomenon. Polysemy is governed by motivated processes which are productive, rule-governed, predictable, and available in many other languages. For this reason certain patterns of meaning recur over and over again in the languages of the world. There is also a phenomenon of irregular polysemy (heterosemy), where the relations among the different senses are idiosyncratic and consequently unpredictable, e.g. 'behave' in 'The children behaved unacceptably' (neutral meaning) versus 'The children behaved' ('behave well'). But, as Nunberg and Zaenen observe, the phenomenon is rather the exception than the norm (Nunberg and Zaenen 1992: 393). Of the several hundred patterns of Russian polysemy described by Apresjan (1973), only a quarter have no English equivalents.

In typical cases of polysemy, the meanings of a polysemous word are related by motivated links. One such process is metonymical transfer, responsible for creating senses such as 'newspaper' in 'The newspaper fired its editor' – the process maps according to a specific transfer function which takes a thing or concept to something associated with that thing or concept. Synecdoche is considered a special case of metonymical transfer – it involves a function from a part to the whole that enables the part to stand for the whole, e.g. calling a worker 'hands', as in 'All hands on deck'. Another possible process is metaphoric

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[3] In most bilingual dictionaries involving English and French, the verb 'crawl' occurs as the principal equivalent of 'ramper'.

mapping from a model in one domain to a corresponding structure in another domain, e.g. 'foot' in 'the foot of the mountain'. Other examples include: the extension from a feeling ('sad' as in 'The person is sad') to something evoking this feeling (as in a 'sad day') or the systematic relation between words denoting vessels and the quantity that the vessel holds, such as 'spoon' (utensil) and spoonful, as in 'a spoon of sugar'.

What is the nature of the principles that govern the mechanisms that allow the creation of senses? Some authors believe the principles are best thought as a special case of derivation (lexical process). This is probably true for heterosemy which is language-particular, but not for systematic polysemy (Apresjan 1973). Other writers take the principles to be semantic. Pustejovsky (1995) postulates the existence of complex lexical entries (consisting of several levels of linguistic representation: argument structure, event structure, etc.), together with a set of semantic principles that operate on complex lexical representations to yield different interpretations in different contexts (generative operations of type-coercion, co-composition, etc.) – the lexicon specifies the space of possible interpretations of polysemous items. However, many authors doubt that such mechanisms are sufficient to explain the intricate patterns of interactions between word meaning and context. As Fodor and Lepore (1998) and Falkum (2007) demonstrate, Pustejovsky's account makes a range of wrong predictions, it 'fails to account for the flexibility of the processes involved in the modulation of lexical meaning in context' (Falkum 2007: 205).

People like Nunberg (1979), Recanati (2004) think the processes involved in polysemy are pragmatic. Now, one could still argue, following Devitt, that the pragmatic derivations in question are diachronic rather than synchronic:

> To show that the use of an expression is to be explained as an implicature rather than a semantic convention it is not sufficient to show that *there is* a Gricean derivation of the meaning conveyed… The point should seem obvious but it is demonstrated anyway by a consideration of dead metaphors (Devitt 2004). A metaphor is a Gricean paradigm: a derivation from the conventional meaning yields an implicature that is the metaphorical speaker meaning. In time, a metaphor often "dies": an expression comes to mean conventionally what it once meant metaphorically… (Devitt 2011: 30).

But consider the following sentence: 'John has been working for a newspaper'. As Nunberg points out, we feel that this sense of 'newspaper' (publisher) would be recoverable on first hearing by a speaker who knew the sense 'publication' (Nunberg 1979: 145). The fundamental difference between sense selection and sense creation is that creation is productive; the context acts as a stimulus for a productive process rather than as filter selecting out of a pre-established set of meanings. Reducing polysemy to a synchronically unmotivated phenomenon 'would be an anti-explanation'(Nunberg 1979: 150).

INDETERMINACY

Semantic ambiguities (homonymy and scope ambiguities) are determinate, limited to a finite set of alternatives (the set of meanings is fixed and restricted). Pragmatic meanings 'have a certain indeterminacy incompatible with the stable determinate senses usually assumed in semantic theories' (Levinson 1983: 118). Systematic polysemy leads to an infinite proliferation of senses which is an indication of the pragmatic nature of the phenomenon. For example, the verb 'run' has 29 senses in Webster's, divided into nearly 125 sub-senses. Another example comes from Cruse:

> The meaning of *knife* … is a contextually sensitive continuum, with an indeterminate number of moderately consolidated specific nodules [senses] forming in a range of contexts … the meaning of *knife* cannot be exhaustively characterized as a determinate set of sub-senses [cutlery, weapon, tool, instrument] … words with a similar type of internal semantic structure are legion (Cruse 2000: 37-38).

Now consider our first example 'and'. Once we adopt the polysemy-account, I can see no principled way of drawing a line between semantic meanings and pragmatic extensions. Why not say that 'and' has, additional to a logical truth-functional sense and senses that imply temporal order and causality, a variety of other senses: a consequence sense, result/upshot/outcome/effect sense (something that results), by-product sense (a secondary and sometimes unexpected consequence), repercussion sense (a remote or indirect consequence of some action/fallout), side-effect sense (any adverse and unwanted secondary effect), corollary sense (a practical consequence that follows naturally), come-uppance sense (an outcome (good or bad) that is well deserved), supervene sense (something that is often unexpected and that has little relation to what has preceded), etc.

True, some senses seem more conventionalized than others – one could argue that we should restrict the number of lexical conventions to govern this subset of senses. But the point is that we have no principled grounds for deciding which of the senses are conventional and which are not. Pragmatic accounts of polysemy can help to avoid the proliferation of senses: words may often have one single general sense which is augmentable in a context-sensitive way.

MEANING ELIMINATIVISM

Making polysemy a matter of semantics rather than pragmatics blurs the distinction between the semantic (arbitrary, stable, determinate, conventional and non-universal) and pragmatic (systematic, variable, indeterminate, non-con-

ventional and universal). As a result, it has led lexical semanticists to 'Meaning Eliminativism', the view that there is no such thing as 'the meaning of a word' in isolation from particular contexts. According to Cruse , meanings 'are created and dissolved with changes in the context', 'it is not possible *in general* to adequately specify the semantic properties of words in a context-free form', and there is 'a disturbing degree of fluidity' in semantic structure (Cruse 2000: 30 and 51). Because we are not able to draw a sharp line between polysemy and generality, Geeraerts (1993) concludes that meanings are not fixed entities. Cruse ends his paper on polysemy with the following nihilistic conclusion:

> … there is no such thing as 'the meaning of a word' in isolation from particular contexts: decontextualization of meaning is variable, and in principle, always incomplete (Cruse 2000: 51).

It seems that if we want to escape pessimistic conclusions of lexical semanticists and if our effort is to draw as rigorous as possible a line between the semantic and pragmatic, then making polysemy a matter of semantics rather than pragmatics is not a strategy to be recommended.

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