

Hundred Years of Lexical Semantics

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Abstract

A schematic overview of the history of lexical semantics is presented, based on the following four features. First, the history of lexical semantics is characterised by a succession of different theoretical approaches that are related by lines of similarity and extrapolation as well as mutual opposition. Five important approaches may be distinguished: pre-structuralist diachronic semantics, structuralist semantics, lexical semantics as practised in the context of generative grammar, logical semantics, and Cognitive Semantics. Second, the major approaches have enlarged the empirical domain of lexical semantics in a fairly systematic and complementary fashion. Third, the development of literary semantics runs parallel to that of lexical semantics. Fourth, the underlying currents characterising the development of both disciplines may be defined against the background of what will be called “Dilthey’s problem”: the problem of how to establish valid interpretations for linguistic utterances.

1. Introduction

The overview that the present paper, modestly and succinctly, will try to give of the history of lexical semantics, will cover three different aspects of the discipline. On the level of *theory*, the main lines in the development can be charted as a succession of competing (and sometimes converging) theoretical currents. With regard to the *empirical scope* of lexical semantics, a gradual broadening of the domain of enquiry will be described. Finally, as far as *methodology* is concerned, the underlying lines in the development will be identified as alternative answers with regard to the hermeneutic problem, i.e. the methodological problem of interpretation. In particular, I will suggest that the development of lexical semantics roughly (and perhaps surprisingly) parallels the development of the theory of literary interpretation.

Against the background of my personal history of publication, so to speak, the present paper takes its point of departure in the work on the history of semantics that I published a number of years ago (1986, 1988a, 1988b). In the meantime, my research efforts have been devoted largely to the development of an empirical theory of lexicological variation (1997, Geeraerts et al. 1994). However, the historiographical topic being far from exhausted, the centenary of Bréal's *La sémantique* presents itself as an ideal occasion to try and take the lines that I set out earlier one step further.

Trying to squeeze the intellectual history of an entire century in just a few pages is inevitably a matter of simplification - thought-provoking at best, at worse, merely provocative. The present paper, then, should primarily be seen as an exercise: is it possible to find a satisfactory framework for presenting the history of lexical semantics in a coherent and insightful way? Any such attempt will turn out to be an interpretation, with specific assumptions and a specific choice of perspective. The adequacy of the interpretative framework could then be evaluated from various points of view. One form of adequacy involves the correctness with which the various currents and individual positions, and the influences among these are described. But a different type of adequacy would be the usefulness of the framework: does it yield a good expository narrative for introducing novices to the field, or does it perhaps yield new insights that could further the development of the discipline? The aim I would like to set myself involves this kind of usefulness perhaps more than mere correctness; I would like to arrive at an overview of the past that helps to analyze the present in a way that brings out a number of fundamental issues that would have to be solved in the next stages of development. I will be the first to concede, though, that it could just as well be said that my historical reconstruction is merely a way of defining what I consider to be important issues in lexical semantics. I would be happy to live with such a relativized appreciation - but I would certainly hope that my reconstruction could help to convince others of the importance of those points.

2. Stages in the development of lexical semantics

As a first part of the overview, I will now summarily describe the main stages in the historical development of lexical semantics that I iden-

tified in the publications from the 1980s that I referred to above. For aspects going beyond the brief description given here, the reader is requested to consult the original publications. (The present paragraph corresponds to a large extent with the overview in the first paragraph of Geeraerts 1992.)

The five stages in the history of lexical semantics that it seems worthwhile to distinguish are the following: pre-structuralist diachronic semantics, structuralist semantics, lexical semantics as practiced in the context of generative grammar, logical semantics, and Cognitive Semantics.

Pre-structuralist diachronic semantics dominated the scene from roughly 1870 to 1930. This does not mean, to be sure, that there is no form of lexical semantics before 1870. It is only by the middle of the 19th century, however, that research into word meaning establishes itself as a distinct subdiscipline of the new science of linguistics. At the level of individual researchers, re-structuralist diachronic semantics is represented by Bréal and many others, like Paul, Darmesteter, Nyrop, and (at the end of the relevant period) Camoy and Stem; a systematic treatment of the main figures and currents may be found in Nerlich (1992).

At the methodological level, the type of semantic research meant here may be characterized by the following three features. First, in line with the overall nature of 19th century linguistics, the orientation is a diachronic one: what semantics is interested in, is change of meaning. Second, change of meaning is narrowed down to change of word meaning: the orientation is predominantly semasiological rather than onomasiological (or grammatical, for that matter). Third, the conception of meaning is predominantly psychological, in a double sense. Lexical meanings are considered to be psychological entities, that is to say, (a kind of) thoughts or ideas. Further, meaning changes (the main domain of research of pre-structuralist semantics) are explained as resulting from psychological processes. The general mechanisms that are supposed to underlie semantic changes and whose presence can be established through the classificatory study of the history of words, correspond with patterns of thought of the human mind. A concept like metonymy is not

just a linguistic concept, it is also a cognitive capacity of the human mind.

The origins of *structuralist semantics* are customarily attributed to Trier (1931), but while Trier's monograph may indeed be the first major descriptive work in structuralist semantics, the first theoretical and methodological exposé of the new approach (which, needless to say, took its inspiration from De Saussure) is to be found in Weisgerber (1927). Weisgerber criticizes pre-structuralist historical semantics precisely on the three characteristic points mentioned above. First, the study of meaning should not be atomistic but should be concerned with semantic structures. Second, it should be synchronic instead of diachronic, and third, the study of linguistic meaning should proceed in an autonomously linguistic way. Because the meaning of a linguistic sign is determined by its position in the linguistic structures of which it is a part, linguistic semantics should deal with those structures directly, regardless of the way in which they may be present in the individual's mind. Because the subject matter of semantics consists of autonomous linguistic phenomena, the methodology of linguistic semantics will be autonomous, too.

The realization of this attempt to develop a synchronic, non-psychological, structural theory of semantics depended on the way in which the notion of semantic structure was conceived. In actual practice, there are mainly three distinct definitions of semantic structure that have been employed by structuralist semanticists. More particularly, three distinct kinds of structural relations among lexical items have been singled out as the proper methodological basis of lexical semantics. First, there is the relationship of semantic similarity that lies at the basis of semantic field analysis, inaugurated by Trier and ultimately leading to componential analysis in the work of anthropological linguists such as Goodenough (1956) and Lounsbury (1956), and, apparently independently, in the work of European structuralists such as Pottier (1964). Second, there are unanalyzed lexical relations such as synonymy, antonymy, and hyponymy; these were for the first time systematically selected as the methodological basis of structural semantics by Lyons (1963). Third, syntagmatic lexical relations were identified by Porzig (1934) under the name of "wesenhafte Bedeutungsbeziehungen"; they later reappeared as selectional

restrictions in the neostructuralist kind of semantics that was incorporated into generative grammar by Katz and Fodor (1963). With this article (undoubtedly one of the single most influential ones in the history of the discipline), lexical semantics indeed moved into a next stage of its development.

All through the second half of the 1960s and the major part of the 1970s, the *neostructuralist, generativist model of lexical-semantic description* introduced by Katz and Fodor (later developed by Katz, specifically in Katz 1972) formed a reference point for studies in lexical semantics. The appeal of Katzian semantics was at least partly due to its incorporation into generative grammar; it profited from the superior position that the generative paradigm occupied in linguistic theorizing in the period in question. Intrinsically (i.e. as a theory of lexical semantics), Katzian semantics combined a culmination of the structuralist approach with two characteristics that were intimately connected with its incorporation into generative grammar. First, Katz took over the Chomskyan requirement that linguistic analyses be rigidly formalized. In particular, componential analysis in the Katzian model was at the same time a method of descriptive analysis and a formal apparatus that seemed indispensable to comply with the requirement of algorithmic formalization imposed by Chomskyanism.

Second, Katzian semantics took over the mentalistic self-conception of Chomskyanism. By defining the subject matter of semantics as the competential 'ability to interpret sentences' of the language user, semantics came to share the promises of explanatory adequacy that constituted so much of the appeal of generative grammar.

Third, Katzian semantics brought together the three types of semantic relations that could lie at the basis of structuralist semantic theories (as described at the end of the previous section). In the first place, paradigmatic similarity relations along the lines of lexical field theory showed up in Katz and Fodor's adoption of componential analysis. In the second place, syntagmatic restrictions on the combination of words were captured in selectional restrictions (such as that the direct object of *eat* has to refer to something edible). And in the third place, the paradigmatic lexical re-

lations highlighted by Lyons (1963) were not discussed in the 1963 article, but in 1972 (apparently as a result of the publication of Lyons's book), Katz pointed out explicitly that semantic theory should be concerned with lexical relations such as synonymy, antonymy, and hyponymy.

In short, Katzian semantics was a singular combination, within the framework of generative grammar, of a basic structural semantic methodology, a mentalist philosophy of language, and a formalized descriptive apparatus. The further development of lexical semantics was characterized by two tendencies. In each case, semantics moved away from the structuralist pole of the Katzian synthesis towards one of the other two poles. On the one hand, the demands of formalization diminished the structuralist influence in semantics in favour of logical approaches to meaning analysis. On the other hand, attempts to take the mentalist position of Katzian semantics seriously led to a straightforward psychological, cognitive orientation in semantic studies.

The evolution towards *logical semantics* took place in two steps: after a primary transition from the formalization used by Katz towards a notational system couched in the tradition of predicate logic, the set-theoretical elaborations and refinements of classical logic were introduced into linguistic semantics, mainly in the framework of Montague grammar. In both cases, the evolution was a logical (that is, 'natural, obvious') one, deriving as it did from certain inadequacies in Katz's formalizations. Thus, in the first phase, Weinreich (1966) among others pointed out that the formalized readings that Katz attributed to sentences did not have internal structure: because the meaning of a sentence was derived by simply adding together the componential definitions of the words in the sentence, the formal readings were unable to distinguish between such sentences as *cats chase mice* and *mice chase cats*. Because predicate logic provided a formalism for dealing with the semantic structure of sentences, its adoption was a natural step, which was taken in full by the Generative Semantics movement (also because quantifiers - another major topic in formal logic - played an important role in the discussion with Interpretive Semantics, the competitor of Generative Semantics within the overall generative approach).

The next stage in the development was reached when logicians remarked that symbolical representations of meaning (including those couched in the formalism of predicate logic) had to be formally interpreted in the modeltheoretical sense if semantics was to become truly formal (see Lewis 1972). The subsequent introduction of the set-theoretical apparatus that is needed to ensure a formal interpretation of the representational language completed the evolution towards logical semantics.

In the context of an overview of the methodological history of lexical semantics, the evolution towards logical semantics basically means a shift of emphasis from lexical semantics to sentential semantics. Truth conditions are the primary point of interest of logical semantics, and truth conditions are properties of propositions, not of individual words. Thus, Thomason's statement that a semantic theory need not specify the way in which items such as *walk* and *run* differ in meaning (1974: 48) is typical for the shift in interest from lexical relational structures to sentential structures. As a result of this shift in interest, the logical approach to lexical semantics is somewhat of a minor tradition - within the field of lexical semantics, that is. When it is not merely a formalization of descriptive approaches developed within structuralist semantics (as in Dowty's 1979 reformulation of componential definitions in terms of Montague grammar), its descriptive contribution to lexical semantics resides mainly in the analysis of lexical items corresponding with logical operators (such as quantifiers and connectives), and in the analysis of the syntactic meaning of word classes (corresponding with, e.g., the 'types' of Montague grammar). For an overview of the contributions of these aspects of logical semantics to lexical semantics, see the relevant chapter in Chierchia and MacConnell (1990.)

The development towards *Cognitive Semantics* can best be traced in the discussion between the componential method advocated by Katz, and the axiomatic, meaning postulate method for semantic representation. As the use of semantic postulates originated in formal logic, the initial phase of the discussion appeared to be just another aspect of the tension between Katz's linguistic approach and existing logical forms of analysis. It gradually became clear, however, that a decompositional approach would need semantic axioms in any case, among other things to represent

redundancy rules; conversely, Dowty (1979) made clear that it was possible to incorporate decompositional, componential definitions into a Montagovian semantic theory. In this sense, the formal compatibility of the decompositional and the axiomatic approaches was established. But given this compatibility, the question became what degree of decomposition was necessary. This was no longer a formal question, but a substantive one, and it could be solved by using experimental evidence relating to the psychological reality of decompositional representations. However, in the discussion triggered by experimental studies such as Fodor, Fodor and Garrett (1975), Katz pointed out (1981) that the experiments clearly involved performance processes, whereas his own approach clearly intended to be a competence theory of semantics.

At this point, a particular tension within the Katzian approach became apparent. On the one hand, using psycholinguistic data about performative processes was the ultimate consequence of the mentalist position of Katzian semantics; if semantic descriptions did indeed have psychological reality, it was methodologically acceptable to use all kinds of psychological evidence. On the other hand, there were two other aspects of Katz's position that opposed this methodological extrapolation of the mentalist position of Katzian semantics. Both the generative notion of competence and the structuralist attempt to develop an autonomous method for linguistic semantics led to reluctance with regard to the use of performative psychological data. Remembering Weisgerber's charges against psychological approaches in semantics, it should be clear that Katz's mentalism was not a straightforward methodological position: it characterized the object of the investigation as something that is psychological real, but it apparently did not influence the method used to study that object. That method remained structural, in the sense that it was based on static relations between linguistic elements, rather than on actual psychological processes.

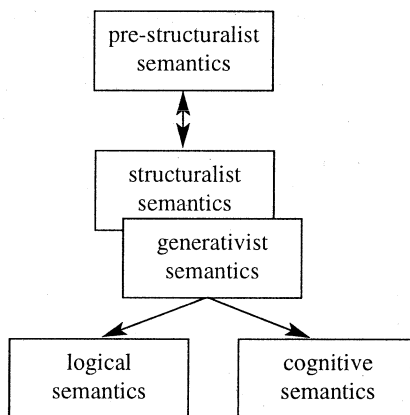
On the other hand, however, the 'performative', psychological, non-autonomous option that gradually appeared in linguistic lexical semantics was able to link up with existing work on natural language categorization and meaning representation, as carried out in psycholinguistics and artificial intelligence. In this kind of research, the original question with regard to the alternative between componential and axiomatic ap-

proaches is transcended into the more general question 'What does an adequate model of man's use and knowledge of language look like?'. To the extent that researchers in psycholinguistics and artificial intelligence generally do not estimate that the linguistic capacities of man can be studied in isolation from his other cognitive capacities, the autonomistic methodological ideal of structuralism is abandoned, not just by using 'performative', on-line psycholinguistic data, but more generally by incorporating the study of natural language semantics into cognitive science at large. In linguistic semantics, this psychological reorientation has led to the school of Cognitive Linguistics of which Lakoff (1987) and Langacker (1987) are the leading figures.

As far as lexical semantics is concerned, the cognitive approach takes mainly two forms (see Violi 1997 for an introduction and further refinements, and compare Ungerer & Schmid 1996). On the one hand, the prototypical theory of categorial structure developed in psycholinguistics by Rosch is taken as the basis for models of the internal structure of natural language categories (cf. Taylor 1989). On the other hand, along the lines of Lakoff and Johnson (1980), a renewed interest in metaphor has led to a new wave of research into the epistemological role of cognitive models and their experiential background. (Further aspects will be mentioned in the following paragraph.)

Now, given this brief overview of the traditions that have dominated the course of development of lexical semantics, Figure 1 suggests a schematic representation of the relevant lines of development. Each of the boxes in the figure represents one of the five approaches. The boxes representing the structuralist and the transformationalist approach overlap because of the structuralist aspects of the approach inaugurated by Katz. Structural semantics and neostructuralist transformational semantics share an autonomist preoccupation with the paradigmatic and syntagmatic relations that make up the semantic structure of the lexicon; the transformationalist approach to lexical semantics is dubbed 'neostructuralist' because it adds to this both a mentalist self conception and a much greater interest in rigorous formalization than had been usual. The lines connecting the boxes indicate the relationships between the approaches. The double arrow between Pre-structural Historical Semantics and Structural Semantics indicates that the latter is a reaction to the for-

mer. The single arrows starting from the Neostructuralist Transformational Semantics box indicate a natural development rather than opposition: the shift towards Logical Semantics and Cognitive Semantics is a consequence of the attempt to take, respectively, the formalized and the mentalist character of transformationalist semantics seriously.

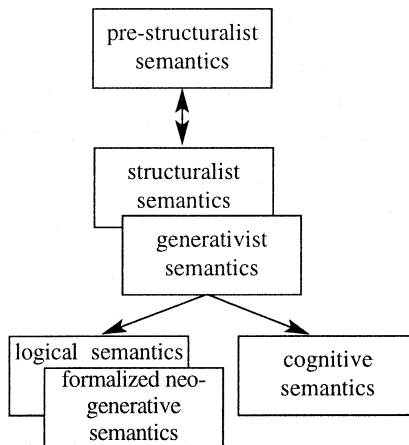


(Figura 1)

Three additional features of the development sketched above should be highlighted. First, the approach inaugurated by Katz appears to have had a pivotal function in the history of lexical semantics: it summarizes the structural approach, but at the same time, the two innovations that it added to a more traditional structuralist methodology eventually led to forms of semantics that went far beyond the initial structuralist position. Second, as I have explained at greater length elsewhere (1988a), the cognitive approach is to a large extent a return to the questions and interests of the pre-structuralist tradition of diachronic semantics. For one thing, the cognitive revival of diachronic semantics links up with the gigantic amount of historical work done in the pre-structuralist stage of the development of lexical semantics.

Second, the overview is not very explicit about the kind of work that grew most directly from the generative tradition of the 1960s and 1970s. In recent years, in fact, the work of James Pustejovsky and his associates has given an original and influential impetus to lexical semantic research within the paradigm of a generative grammar, continuing and developing the lines

set out by Jackendoff. (See, for instance, Pustejovsky 1994.) From a methodological point of view, this approach may be situated somewhat in between formal semantics in the strictly logical sense, and Cognitive Semantics. With the former, it shares the importance that it attaches to formalization (and, in fact, the forms of formalization that it uses are to a considerable extent inspired by logical formalisms). With the latter, it shares an interest in the flexibility and dynamism of meaning. Pustejovsky's work, for instance, is very much concerned with the mechanisms of polysemy, just like a lot of Cognitive Semantic work. However, this approach is reluctant to take over one of the basic assumptions of Cognitive Semantics, viz. The encyclopedic nature of meaning - the idea that it is hardly useful for the analysis of natural language to adhere to a strict distinction between the level of linguistic meaning *stricto sensu* and the level of world knowledge. By maintaining the distinction, formalized semantics of the Jackendoff/Pustejovsky school remains close to the tradition of structural semantics. (For a good illustration of the consequences of accepting or rejecting the distinction, see the discussion between Taylor 1996 and Jackendoff 1996.) All in all, then, the Jackendoff/Pustejovsky approach (which might be called 'formalized neo-generative semantics') is perhaps closer to logical semantics than to Cognitive Semantics. Figure 2 contains a suggestion for how the approach might be accommodated within the schema presented in Figure 1.



(Figure 2)

Third, Cognitive Semantics and traditional historical semantics share, by and large, a psychological conception of meaning. And third, both approaches start from an encyclopedist conception of meaning, in the sense that lexical meaning is not considered to be an autonomous phenomenon, but is rather inextricably bound up with the individual, cultural, social, historical experience of the language user. On these three points, then, there is a basic methodological contrast between pre-structural and post-structural semantics on the one hand, and structuralist semantics on the other. The latter imposes a strict dichotomy between synchrony and diachrony rather than accepting that a stable synchronic state is an unrealistic idealization. Further, it assumes the existence of an autonomous solely linguistically relevant semantic structure (as distinct from the encyclopedic level of meaning). And finally, although it would probably not want to deny the psychological reality of the structures it describes, it clings to the methodological autonomy of semantics, whereas the other approaches profess an interdisciplinary openness. In this respect, one of the major developmental dimensions in the history of lexical semantics appears to involve its methodological autonomy; whereas the structural and neostructural traditions alike try to achieve a language-immanent approach, the psychological orientation of the cognitive and the pre-structuralist school implies a shift towards interdisciplinarity.

We will have a further look at these underlying trends in paragraph 4. At this point, let us retain the following point: the history of lexical semantics is characterized by a succession of different theoretical approaches that are related by lines of similarity and extrapolation as well as mutual opposition.

3. The empirical scope of lexical semantics

Given the main traditions of lexical semantics as identified in the previous paragraph, what has been their contribution to lexical semantics in terms of the empirical field of research covered? Answering that question requires a conceptual map of the field of lexical semantics, and such a map, I believe, should be based on at least three distinctions: the distinction between *semasiology* and *onomasiology*, the distinction between *structural* and *pragmatic onomasiology*, and the distinction between *the*

qualitative and the quantitative aspects of lexical structures. These distinctions will be presented in more detail presently, but it should first be pointed out that the three dimensions do not in themselves exhaust the possibilities for distinguishing between different forms of doing lexical semantics. At least two additional distinctive dimensions would have to be included to get a truly comprehensive picture: the distinction between *diachronic semantics and synchronic semantics*, and the distinction between *referential and non-referential types of meaning*. These two additional dimensions cross-classify with the three basic ones and with each other: one can study onomasiological changes, for instance, or changes of non-referential meaning. The reason for not including them, then, is one of practice rather than principle: in order to get a First picture of the field, I think it may be acceptable to start off with those dimensions that relate to the core area of lexical semantics, viz. the synchronic (rather than diachronic) structure of referential (rather than non-referential) meanings.

Let us now have a closer look at each of those three core dimensions. The distinction between onomasiology and semasiology is a traditional one in Continental structural semantics and the Eastern European tradition of lexicological research, but it has hardly found its way to the canonical English terminology of linguistics. It does not appear, for instance, in most standard textbooks of linguistics. The following quote from the Swiss romanist Kurt Baldinger illustrates the distinction quite nicely.

“Semasiology ... considers the isolated word and the way its meanings are manifested, while onomasiology looks at the designations of a particular concept” (1980: 278).

The distinction between semasiology and onomasiology, then, equals the distinction between *meaning* and *naming*: semasiology takes its starting-point in the word as a form, and charts the meanings that the word can occur with; onomasiology takes its starting-point in a concept, and investigates by which different expressions the concept can be designated, or named.

The quote from Baldinger introduces yet another distinction that has to be taken into account, though. The full quotation, in fact, goes like this:

“Semasiology... considers the isolated word and the way its meanings are manifested, while onomasiology looks at the designations of a particular concept, that is, at a multiplicity of expressions which form a whole” (1980: 278).

The two descriptions of onomasiology that Baldinger mentions are not exactly equivalent. On the one hand, studying “a multiplicity of expressions which form a whole” leads directly to the *traditional, structuralist conception of onomasiology*, i.e. to the study of semantically related expressions (as in lexical Field theory, or the study of the lexicon as a relational network of words interconnected by links of a hyponymical, antonymical, synonymous nature etc.). On the other hand, studying “the designations of a particular concept” opens the way for a *contextualized, pragmatic conception of onomasiology*, involving the actual choices made for a particular name as a designation of a particular concept or a particular referent.

This distinction between a structural and a pragmatic interpretation of onomasiology can be defined even more precisely by equating it with a distinction between an investigation of structure, and an investigation of use. The structural conception deals with sets of related expressions, and basically asks the question: what are the relations among the alternative expressions? The pragmatic conception deals with the actual choices made from among a set of related expressions, and basically asks the question: what factors determine the choice for one or the other alternative?

In order to tackle the latter question in a systematic fashion, yet another distinction has to be envisaged, viz. that between what may roughly be described as the *qualitative* versus the *quantitative* aspects of linguistic semantic structure. (It will become clear in the course of the following pages that these terms are somewhat problematic, but they are used here primarily as mnemonic devices.)

The distinction may be introduced by considering semasiological structures first. Qualitative aspects of semasiological structure involve the following questions: which meanings does a word have, and how are they semantically related? The outcome is an investigation into polysemy, and the relationships of metonymy, metaphor etc. that hold between the various readings of an item. Quantitative aspects of lexical structure, on the other hand, involve the question whether all the readings of an item carry the same structural weight. The outcome, obviously, is an investigation into prototypicality effects of various kinds. Needless to say, the qualitative perspective is a much more traditional one in semasiological lexicology than the quantitative one, which was taken systematically only recently, with the birth and development of prototype theory.

The distinction between qualitative and quantitative aspects of semantic structure can be extrapolated to onomasiology. The qualitative question then takes the following form: what kinds of (semantic) relations hold between the lexical items in a lexicon (or a subset of the lexicon)? The outcome, clearly, is an investigation into various kind of lexical structuring: field relationships, taxonomies, lexical relations like antonymy and so on. The quantitative question takes the following onomasiological form: are some categories cognitively more salient than others, that is, are there any differences in the probability that one category rather than another will be chosen for designating things out in the world? Are certain lexical categories more obvious names than others? Again, this type of quantitative research is fairly new. The best-known model to date is Berlin & Kay's basic level model (see Berlin 1978), which involves the claim that a particular taxonomical level constitutes a preferred, default level for categorization.

The overall picture of the field of lexicology that emerges from the foregoing is charted in Figure 3.

The next step to take involves the recognition that each of the major areas in the overview presented in the previous paragraph is typically covered by a specific theoretical tradition from the history of lexical semantics. Each of the three major traditions mentioned in the first paragraph focusses specifically on a particular area of the conceptual map.

The *pre-structuralist tradition* of diachronic semantics, to begin with, deals predominantly with the “qualitative” aspects of semasiology - with processes like metaphor and metonymy, that do not just function as mechanisms of semantic extension, but that constitute, at the same time, the synchronic links between the various readings of a lexical item. *Structuralist semantics*, on the other hand, focusses on “qualitative” phenomena of an onomasiological (a structural onomasiological) kind, such as field relations, taxonomical hierarchies, and lexical relations like antonymy. *Cognitive semantics*, finally, shifts the attention towards the “quantitative” aspects of lexical structure: all forms of prototypicality effects in the semasiological realm, and basic levels on the onomasiological side.

	Semasiology	Structural Onomasiology	Pragmatic Onomasiology
“Quality” Elements & Relations	senses+ semantic links (metaphor, metonymy etc.)	items + lexical relations (fields, networks etc.)	factors determining lexical selection
“Quantity”. Differential Weights	salience phenomena, core versus periphery	entrenchment, cognitive salience of categories	

(Figura 3)

This overview of the different descriptive focus of the various traditions of lexical semantics also shows how the conceptual map presented in Figure 3 got gradually filled out by different theoretical approaches with different descriptive priorities. There is a historical progression, in fact, from “qualitative” semasiology to “qualitative” onomasiology, and hence to an interest in “quantitative” phenomena on the semasiological as well as on the onomasiological level. The actual historical development from pre-structuralist semantics over structuralism to Cognitive Semantics constitutes a *gradual extension of the descriptive scope of lexical semantics*. It will also be recognized, on the other hand, that the field is

not yet completely covered: as mentioned before, the area of pragmatic onomasiology has so far received only minimal attention (but see Geeraerts et al. 1994 for a integrated model of lexical variation that includes pragmatic onomasiology as defined here). It would seem natural, in other words, that the further development of lexical semantics will involve the domain of pragmatic onomasiology.

	Semasiology	Structural Onomasiology	Pragmatic Onomasiology
<i>"Quality" Elements & Relations</i>	pre- structuralist diachronic semantics	structural semantics	????
<i>"Quantity". Differential Weights</i>	cognitive Semantics: prototype theory	Cognitive Semantics: basic level research	

(Figure 4)

The overview of the descriptive preferences of the major traditions of lexical semantics is summarized in Figure 4. In order to avoid misunderstanding, it is important to strike a note of warning: the figure charts dominant domains of activity rather than strictly confined fields. The various traditions, that is, are certainly not *restricted* in their activities to the empirical areas mentioned in the overview. Let us consider some important nuances with regard to each of the three major traditions.

First, pre-structuralist semantics does not have an exclusively semasiological orientation. Onomasiological considerations may enter the classification of types of semantic change wherever necessary. The notion of analogical changes of meaning, in particular, presupposes an onomasiological perspective. "Analogical change" is the general name for semantic extensions that copy the meaning of another, related word. Analogical changes can be subclassified on the basis of the associative onomasiological link that exists between the expression that is subject to the semasiological extension, and the expression that furnishes the model

for the extension. In cases of semantic loans (sometimes called “semantic calques”), for instance, the associative link between the source expression and the target has a semantic character. In cases of ellipsis (when a word takes over meanings from a syntactically complex expression of which it is a part), the relationship between the two expressions involved in the analogical change is syntagmatic rather than semantic.

Second, structuralist semantics does not have an exclusively onomasiological orientation. By focussing on distinctiveness as a basic phenomenon to be considered in lexical semantics, it generally proclaims the primacy of onomasiological phenomena over semasiological phenomena. The research strategy of componential analysis, for instance, is basically to derive the semasiological description of the meaning of individual lexical items from an analysis of the onomasiological relations that the item in question entertains with other items in the same lexical field. Semasiological analysis, in short, is far from absent from the structuralist approach, but depends on an initial onomasiological analysis. In some forms of structuralism, the semasiological orientation is even more outspoken. Katz’s componential analysis of *bachelor*, for instance, focusses on the distinctiveness of the various readings of a lexical item among each other, rather than on the distinctiveness of the items in a lexical field.

Third, Cognitive Semantics is not restricted to prototype theory and basic level research. Specifically, there are at least two important contributions that Cognitive Semantics has made to the structural onomasiological perspective: on the one hand, the development of the Fillmorean frame model of semantic analysis (Fillmore 1977), and on the other hand, the introduction of generalized metaphor research in the line of Lakoff & Johnson (1980).

Given these nuances with regard to the picture drawn in Figure 4, we now have a fairly accurate idea of the niche occupied by the various traditions of research within the overall domain of lexical semantics. Essential to the topic of the present paper is the recognition that there is empirical progress in the development of the discipline: The actual historical development from pre-structuralist semantics over structuralism to Cognitive Semantics constitutes a gradual extension of the descriptive

scope of lexical semantics. This form of empirical progress constitutes a nuance with regard to the historical picture that was painted in paragraph 2: while the theoretical development of lexical semantics is characterized by *shifts and oppositions*, the empirical development is characterized by *complementarity and accumulation*.

4. Lexical semantics and literary theory

At the end of paragraph 2, it was suggested that the picture painted there could be further elaborated by having a look at the methodological undercurrents at work in the history of lexical semantics. The perspective that I would like to introduce to bring out the underlying tendencies connecting (and separating) the five developmental stages described in the previous pages, may be identified against the background of the following quote from Bréal:

“Si l’on admet une différence entre les sciences historiques et les sciences naturelles, si l’on considère l’homme comme fournissant la matière d’un chapitre à part dans notre étude de l’univers, le langage, qui est l’oeuvre de l’homme, ne pourra pas rester sur l’autre bord, et la linguistique, par une conséquence nécessaire, fera partie des sciences historiques.”

The quotation invokes a Diltheyan distinction between linguistics as a *Geisteswissenschaft* (a human science) and linguistics as a *Naturwissenschaft* (a natural science). As a human science, the object of linguistics is meaning as an expression of human experience. The method is that of interpretation, of *Verstehen* as against *Erklären*, where “understanding” (*Verstehen*) implies an attempt to recover the original expressive intention behind the expressions. Considering linguistics as a natural science, on the other hand, involves a definition of its object as an autonomous or de-subjectivized entity, to be studied with the same formal rigour and objectivity with which the exact sciences operate on their domains of research.

Against the background of this distinction, pre-structuralist diachronic semantics and Cognitive Semantics belong together on the human-scientific side of the dichotomy. Both conceive of language prima-

rily as an expression of the human mind trying to get a cognitive grip on reality. The experience of an individual, or an entire culture, is expressed in the language, and understanding language use equals understanding this experiential background. The experiential background may be based on universal features of human existence (of, for instance, a physical or physiological kind), but just as often, it may be historically or culturally specific: humanity deals with the world in diverse ways, and this diachronic or cross-cultural variety has to be envisaged explicitly in linguistic description.

Structural semantics and logical semantics, on the other hand, may - in spite of the enormous difference that separates them - be situated on the side of a natural-scientific approach. Or at least, they exhibit tendencies that create a distance with regard to a straightforward human-scientific approach. In the case of structural semantics, the main feature is perhaps the de-psychologisation of the object of the semantic enterprise. The semantic system acquires methodological dominance over the entities in the system, and over the linguistic subjects using (and adapting) the system. Semantics is implicitly decontextualized. By concentrating on the semantic system as a network of mutual relations, the referential link with the outside world is neglected; meaning is defined contrastively, and the referential context of the language is all but ignored. At the same time, the mental nature of the language is not denied, but it does not constitute a methodological point of departure; the experiential grounding of the language, the way in which language reflects and interacts with experience, moves out of focus.

In the case of logical semantics, it is the formalization of the semantic enterprise that embodies the shift towards a natural-scientific approach. Semantic description should be couched in a formalism that is as rigorous as the forms of description used in the mathematical sciences.

It seems, in short, that one of the major undercurrents in the historical development of lexical semantics is the position the various theoretical approaches take with regard to a Diltheyan distinction between a human-scientific and a natural-scientific conception of language. As a semantic counterpart to Chomsky's introduction of "Plato's problem" (the

bootstrapping problem of language acquisition), we may perhaps define the problem of interpretation as *Dilthey's problem*: given the interpretative nature of semantics as a *Geisteswissenschaft*, what are the criteria for interpretations? To get a better grip on the problem, notice that the process of semantic interpretation is characterized by a specific tension between the attempt to interpret correctly, and the subjective element that any form of interpretation seems to involve. The object of the human sciences is constituted by the exteriorizations of lived experience: not only works of art and literary texts, but also, for instance, the social and cultural institutions that embody the life of a community. The method of the human sciences, on the other hand, is based on interpretation: on understandingly recovering the experience behind the expressions. But can this process of recovery be concluded in an objective fashion? Does it lead to certainty? Can we be sure that our interpretations are correct? Can we truthfully determine the original experience and the authentic intention behind the expressions? While nature is governed by the necessity of natural laws, human life is governed by purposive action and conscious effort; the realm par excellence of human life is the unfolding of history. As such, can there be a general interpretative method that universally spans the entire range of the history of mankind, disregarding the historical differences between the objects of its interpretative activities? Can all historical products be interpreted on the same basis? More importantly still, if man in general is caught in history, can interpreters free themselves from their own historical background when confronting products from the past? Is not, in short, the hermeneutic approach to semantic analysis bound to end in arbitrariness?

Now, the Diltheyan model of interpretation (which seems, as I have suggested, to underlie the position taken by pre-structuralist diachronic semantics and Cognitive Semantics) takes a contextualized starting-point: linguistic expressions have to be understood, that is, they have to be interpreted against the background of the personal, cultural, historical - in short, experiential - context in which they are produced. Knowledge of this context reduces the danger of arbitrariness. The danger cannot, perhaps, be entirely discarded, but it can be controlled by a continuous reflection on the interaction between the language and the context in which it is used (including, for that matter, the context in which it is understood).

The alternative approaches, on the other hand, may be considered different ways of avoiding the problem of arbitrariness. Structuralism moves away from the potential source of the arbitrariness, viz. the subjectivized definition of the language as the expression of experience. By stressing the self contained and autonomous nature of the language, semantic analysis may be defined without reference to the individual language user: if the object of the analysis is something non-psychological and non-subjective, the description itself would seem to be potentially as objective as the method of the natural sciences.

Logical semantics likewise avoids including the subjective or experiential nature of language in its definition of meaning. In addition, it counteracts the danger of arbitrariness by imposing formal restrictions on what is being said. Roughly speaking, what cannot be expressed in the formal language is not a valid interpretation, or at least, falls outside the scope of what can be legitimately and scientifically studied by semantics. As a typical example of this attitude, Thomason's statement that a semantic theory need not specify the way in which items such as *walk* and *run* differ in meaning (mentioned in paragraph 2 above) restricts the scope of semantics on the basis of formal criteria: if the logical language (in this case, a Montagovian type-theoretical language) does not allow for the expression of a specific piece of informational content, that information should not be considered 'semantic'. As Thomason says, the distinction between *walk* and *run* could be considered a lexicographical distinction, not a semantic one - with the clear understanding that semantics carries more scientific weight than lexicography.

Two additional remarks should be made here. First, the restrictions imposed by logical semantics are not fixed. The actual development of logical semantics is a continuous attempt to enlarge the scope of what can be expressed in formally rigorous ways. At the end of the article, I will briefly consider the question whether this expansion of logical semantics opens up perspectives for the convergence of the various approaches. Second, it is important to note that the restrictive attitude of logical semantics derives historically from an outspokenly normative attempt to distinguish between sense and nonsense. To a considerable extent, the sources of contemporary logical semantics lie in the logical systems de-

veloped by the members of the Wiener Kreis, notably Rudolf Carnap. But the whole endeavour of the Vienna Circle was shaped by the neo-positivist attempt to separate 'metaphysical' statements from empirically verifiable ones, to distinguish, in other words, the meaningless from the meaningful (where 'meaningful' is defined very much in terms of verifiability). Perhaps one could summarize such an attitude in the following statement: not everything that is expressed in natural language is legitimately expressed, and semantics has the task of separating the two. Present-day logical semantics has a descriptive rather than normative attitude, but the older stance lives on in the habit of letting the formal system of representation decide what is semantic and what is not.

The recognition that the history of lexical semantics may be seen as a succession of theories dealing in different ways with "Dilthey's problem" inspires a further synthesis of the development. We can now see that, after an initial stage characterized by a contextualized conception of meaning as expression, structural semantics introduces a decontextualizing movement towards a conception of language as a self contained system. The present-day post-structuralist situation, then, is characterized by a tension between the recontextualization effectuated by Cognitive Semantics through the re-affirmation of the importance of the experiential background of language, and the "extremist" position of logical semantics, which seems to accept restrictions on the possibilities of description based on the formal rigour of the descriptive system itself.

The final step that I would now like to take involves a demonstration that the same pattern of development roughly characterizes the evolution of literary semantics. I will do so only succinctly, and with considerable trepidation: crossing the boundaries of one's own discipline is not an obvious thing to do in an age of extreme specialization. I do so only in the hope that the ideas engendered by the confrontation will be fruitful enough to compensate for the simplifications that will inevitably characterize my treatment of literary semantics. By the latter term, I mean those theoretical and critical approaches in literary studies that include a specific epistemological or semiotic position - a position, that is, with regard to the epistemological relationship between reader, writer, and text.

I would like to suggest, then, that the development of literary semantics may be characterized as a succession of five different approaches, which may be related to the five approaches that could be distinguished in the development of linguistic (lexical) semantics. The five approaches to be distinguished are the following: the history of ideas, the text-immanent approaches, French structuralism, post-modernist deconstruction, and the recontextualizing tendencies embodied by reception theory and system theory.

The *history of ideas* (or “Ideeengeschichte”) is the theoretical approach that became dominant by the end of the 19th century; major figures are Wilhelm Dilthey and Rudolf Unger. It considers the literary text as the expression of an individual (typically, a very special individual, if not a genius), or as the expression of the particular world-view of a specific age (a *Zeitgeist*) or a specific people. What is expressed is lived experience and a conception of life. As these are necessarily situated in time, the historical perspective is a natural one for literary criticism: it tries to interpret literary texts against the background of their own times, and more generally, against the background of the writer’s experience. Because of this historical connection, because of the “expressive” conception of the literary text, and because of the contextualist approach to interpretation, there is a natural affinity between this type of literary theory and pre-structuralist diachronic semantics. Both have the same interest in language as a means of individual and collective expression, and both try to interpret language in its historical and experiential context.

In the period after the First World War, a new approach broke with the orientation on the literary author that was typical of the “history of ideas”: not the author or his era, but the literary work as such should be the focus of literary analysis. Such a *text-immanent approach* was defended by the Russian formalists like Roman Jakobson, Viktor Sjklovski, Juri Tynjanov; and by the influential New Critics (F.R. Leavis, William Empson, Cleanth Brooks and others). Against the background of the history of lexical semantics, these immanentist approaches clearly link up with the structuralist stage of development: both posit the autonomy of the language rather than the author as the source of meaning. There is one important distinction, to be sure: linguistic structuralism is concerned di-

rectly with the language, whereas Russian formalism and New Criticism deal with texts - a specific type of linguistic utterance. In Saussurean terms, linguistic structuralism deals with linguistic structures at the level of *langue*, while the text-immanent approaches in literary theory deal with texts, i.e. elements on the level of *parole*.

This distinction is not without importance, because the next stage in the development of literary theory precisely implies a shift from an interest in the individual literary work as an autonomous structure, to the attempt to identify structures at a more deep-seated level. *French structuralism* of the 1960s, as represented by Roland Barthes, Algirdas Greimas, and others, extrapolates the text-immanent approach, but shifts the focus from the individual work of art to the generative system behind that work. Greimas, for instance, tries to develop a universal grammar of literary narratives, showing how allegedly universal "deep structures" are transformed into individual narratives. For obvious reasons, this approach can be coupled with the "generativist" stage in the development of lexical semantics: in its attempt to identify universal deep structures of texts, literary structuralism takes inspiration from Chomskyan generative grammar. In a process that is similar to what Katzian semantics did with structuralist semantics, French structuralism incorporated the autonomous, text-immanent approach into a "generativist" framework. At the same time, though, formalisation and mentalism play a less outspoken role in French structuralism (and the further development of literary theory) than they do in the generativist brand of lexical semantics.

Still, the further development of literary theory is clearly determined by the text-immanent and structuralist theories, just like the present-day situation in lexical semantics can be understood as a development out of structuralist and neostructuralist semantics. And just like in lexical semantics, the post-structuralist situation is characterized by the presence of two diametrically opposite tendencies.

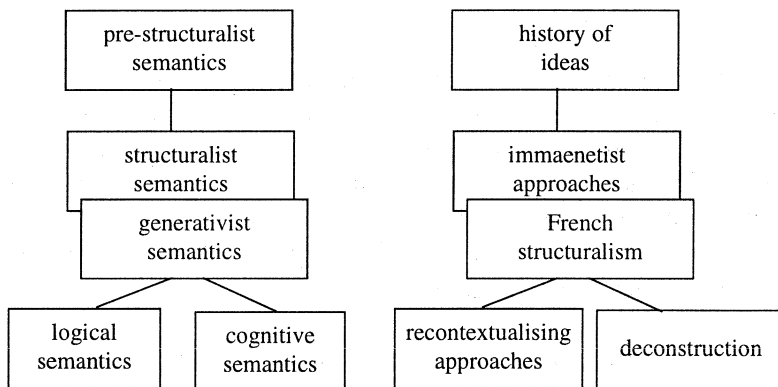
On the one hand, there is a cluster of *recontextualizing approaches*. As opposed to the decontextualization that is characteristic of the previous stages (focusing as they do on the autonomy of the text, or the language), these approaches reaffirm the importance of a contextualized in-

terpretation of the literary texts. I will mention two examples of this re-contextualizing approach: reception theory, and system theory. From the early 1960s onward, a reception-theoretic approach was developed by Wolfgang Iser and Robert Jauss. Linking up directly and consciously with the older Diltheyan conceptions, reception theory investigates how literary works are received by their public - in particular, how the expectations of the audience lead to specific interpretations. More recently, the application to literature of the systems theory approach developed by Niklas Luhman may be considered a further elaboration of the reception-theoretic perspective, showing how literary texts function in the socio-logical context of a literary "system". The expectational horizon with which readers approach texts is not just determined by general Zeitgeist-like conceptions and beliefs, but more specifically by the whole socio-logical network of literary institutions, criticism, the world of publishing, the organisation of literary education, and so on. Together, these socio-logical entities and processes influence what is considered literature, and how it is evaluated. Reception theory and system theory alike analyze how the interpretation of literary texts is restricted by the (intellectual and sociological) context in which the works reach their audiences. In contrast with the older forms of a contextualized interpretation, then, the focus lies not predominantly on the context in which the work was produced, but on the context provided at the receiver's end, so to speak. In this sense, the approach counteracts the autonomizing tendencies at work in the immanentist and structuralist approaches.

On the other hand, *deconstruction* as represented by Jacques Derrida, J. Hillis Miller and others, embodies a radically opposite approach, stressing the infinite interpretability of texts. The process of interpretation cannot in principle be restrained, but rather, there is an unlimited openness to any possible kind of interpretation. Instead of trying to establish how processes of interpretation can be realistically restricted (as in a contextualist approach), deconstructionist criticism is one prolonged demonstration of the interpretative openness of any form of writing. (I deliberately use the word *demon'stration* here: deconstructionists tend to show rather than argue.) In the context of our historical narrative, the deconstructionist movement is an extrapolation - and at the same time, an inversion - of the structuralist point of view. It is an extrapolation to the

extent that the autonomy of the text is made absolute: as a source of meaning, the text forever escapes the interpretative stance of any given reader; texts are, in a sense, beyond the control of readers - including the author himself. It is an inversion to the extent that the universalist tendencies of French structuralism are radically abandoned: the assumption that the meaning of a text ultimately derives from a set of universal underlying structures does not go together with the unlimited interpretability posited by the deconstructionists.

All in all, then, the development of literary semantics appears to follow the same pattern as the development of lexical semantics: after a contextualizing initial stage, followed by a structuralist decontextualizing movement, the present situation is characterized by a distinction between a recontextualizing approach and a more radical approach. A schematic representation is given in Figure 5. The figure highlights the parallelisms in the historical development of both disciplines. The bottom line places the contemporary approaches on a continuum representing different answers with regard to Dilthey's problem. The "extremist" positions in lexical semantics and literary semantics are not, in fact, identical; they rather represent opposing positions with regard to Dilthey's problem: logical semantics takes a highly restrictive attitude, whereas deconstructionism takes a radically open view of interpretation. Both may be contrasted with the moderate, contextualist approach. Deconstruction, to be sure, could be seen as the epitome of the arbitrariness that triggered the formulation of Dilthey's problem to start with. Logical semantics, conversely, seems to throw away the baby with the bathwater, at least when it accepts that the non-formalisable aspects of communication simply fall outside the scope of scientific analysis. How to choose between the various approaches is not, however, the point of the present paper: the main purpose is to show that the notion of interpretation, as embodied by Dilthey's problem, is a fruitful starting-point for trying to get a grip on the undercurrents characterizing a hundred years of semantics.



(Figure 5)

5. Wrapping up

The history of lexical semantics in the last hundred years may be characterized by the following features. *First*, the history of lexical semantics is characterized by a succession of different theoretical approaches that are related by lines of similarity and extrapolation as well as mutual opposition. Five important approaches may be distinguished: pre-structuralist diachronic semantics, structuralist semantics, lexical semantics as practiced in the context of generative grammar, logical semantics, and Cognitive Semantics. *Second*, while the theoretical development of lexical semantics is characterized by contrasts and extrapolations, the empirical development is characterized by complementarity and accumulation. The major approaches have enlarged the empirical domain of lexical semantics in a fairly systematic fashion: pre-structuralist semantics has explored the domain of semasiology; structuralist semantics has enlarged the field of research to onomasiology; and Cognitive Semantics has, with regard to semasiology as well as onomasiology, introduced a “quantitative” perspective, that is to say, an analysis of the differences of structural weight within semasiological and onomasiological structures. *Third*, the development of literary semantics runs parallel to that of lexical semantics. The five literary approaches that may be distinguished are: the history of ideas, the text-immanent approaches, French structuralism, post-modernist deconstruction, and the recontextualizing tendencies embodied by reception theory and system theory. *Fourth*, the underlying currents characterizing the development of both disciplines may be defined against the background of what we have called “Dilthey’s

problem”: the problem of how to establish interpretations - the same problem, in fact, that Eco (1990) has identified and forcefully described in terms of “the limits of interpretation”. In both disciplines, an initial contextualizing stage is followed by a structuralist decontextualizing movement. The present situation is characterized by a distinction between a re-contextualizing approach and a more radical approach (where the “extremist” approaches in both disciplines are opposites on a continuum).

An overview of this type is obviously not possible without considerable simplifications, and one of the following steps to take will certainly be to refine the picture. Another point of elaboration involves the question whether there is any possibility of theoretical convergencies. Within the realm of lexical semantics, the question arises whether Cognitive Semantics and formalized logical semantics could find a common ground. The possibilities of such a convergence are real. To begin with, logical semantics has been expanding its domain in ways that constitute an opening to the contextual determination of meaning. Examples of such expansions are Hans Kamp’s Discourse Representation Theory (Kamp & Reyle 1993), or Pieter Seuren’s Discourse Semantics (1985); both approaches determine reference and truth conditions not directly with regard to the world, but with regard to discourse representations of the world. Such a form of contextualization is clearly much more restricted than what is usual in a cognitive approach, but the shift is important in principle. Further, although formalization as such is not one of the priorities of Cognitive Semantics, the psychological orientation of that approach might lead to a closer alliance with formalized psycholexicology, and hence, to a strengthened appreciation of the importance of formalization for the testing of analyses. And finally, formalized lexical semantics in the line of Jackendoff and Pustejovsky already constitutes (as mentioned near the end of paragraph 2), a form of lexical-semantic description that may be situated in-between logical semantics and Cognitive Semantics.

And perhaps one might even speculate that the common contextualist approach of Cognitive Semantics and the recontextualizing tendencies in literary theory could lead to a renewed interaction between both disciplines - maybe even to a joint effort to provide a realistic answer to Dilthey’s problem. But those would be developments in the next century of lexical semantics ...

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