ZESZYT 25/2005

SERIA FILOLOGICZNA STUDIA ANGLICA RESOVIENSIA 3

Marcin GRYGIEL

THE METHODOLOGY OF ANALYSING SEMANTIC CHANGE IN HISTORICAL PERSPECTIVE

Introduction

The problem of semantic change has preoccupied linguists ever since the beginning of the 19th century. It was at that time when many students of language first realised that sense alterations can no longer be treated as corruption or degeneration and tried to bring them into order and system. This outburst of interest in meaning and its development led to the formation of a new area of linguistic study – the science of semasiology, later denominated into semantics. Although its golden period is long gone, the study of diachronic changes in meaning has never been abandoned entirely. Notice that the 19th century linguists were fascinated both with meaning and its development and consequently semantics was a very productive field of study at that time. Numerous books, pamphlets, treatises dealing with semantic subjects in the broadest sense of the term, dominated the linguistic scene for many decades. In fact, it was the study of semantics that gave rise to modern linguistics as a separate branch of science.

The way in which semantics was perceived also, in many respects, resembled various Langacker's and other cognitivists' ideas. Bréal (1897), who first introduces the term **semantics**¹ into linguistic jargon, claims that both morphology and syntax, as well as word-meaning, make part of it. What is more, Bréal stressed the overriding importance of semantics to which phonetics should be subordinated. The very term *schema* – so popular with Langacker and his followers – was a 19th century invention and the idea of relying on such figures of speech as metaphor and metonymy in the linguistic analysis goes back in time to 1825, when Christian

¹ In a footnote, Bréal (1921[1897]:8) explains the meaning of the term *semantics* in the following manner: $\Sigma \eta \mu \alpha \nu \tau \iota \kappa \eta \tau \epsilon \chi \nu \eta - the science of meanings, from the word <math>\sigma \eta \mu \alpha \iota \nu \epsilon \iota \nu \omega - \epsilon'$ denote', as opposed to phonetics, the science of speech sounds.

Karl Reisig lectured on the Latin language. However, not all aspects of meaning were given equal status and attention. It was the problem of semantic change that predominated during the course of the 19th century.

In the present-day linguistics, where cognitive theories are increasing in popularity and gaining more adherents, semantics seems to occupy more and more central place in grammar. The claim can be both easily justified and illustrated; for Langacker (1987:12) meaning is what language is all about and grammar is simply the structuring and symbolisation of semantic content. In turn, Wierzbicka (1988:3) argues that syntax is semantically motivated, and for Lakoff (1987:228) the task of grammar is to show how aspects of form can follow from aspects of meaning – just to mention some of the more representative examples. The ideas may sound revolutionary and innovative especially when contrasted with the relatively well-established (by linguistic standards, of course) generative tradition, but the history of linguistics shows that cognitive scholars were by no means the first to conceive them.

A logico-classificatory approach

Let us begin our historical outline with Christian Karl Reisig (1792–1829), a classical philologist, and the first semasiologist who originated, in a truly scientific sense, the linguistic quest to find some general principles of semantic change with his series of lectures on Latin. He came to the conclusion that the study of meaning cannot be successfully dealt with either within etymology, or syntax and that is why a new branch of linguistics – **semasiology** – was needed, whose task would be to discover rules governing the development of word meaning.² The objective of Reisig (1890:1–2) was to focus on semantic change as a major area of linguistic interest, and to show the *unfolding of the train of thought with regard to the meaning of the words* and to provide a derivation of all subsequent meanings from the first in a logical and historical order.³

It needs to be mentioned that the quest to reveal semantic laws was prompted by a series of successes in phonetics and historical comparative philology in general. The discovery of the first sound laws by Rask and Grimm gave a fresh impetus to Reisig (1881–90), Darmesteter (1886) and Trench (1851) who embarked on the insurmountable task of harnessing the semantic change in regular patterns. However, Reisig's (1881), Darmesteter's (1886) as well as Littré's (1888) studies on semantics had also a practical goal, that is the

² See Reisig (1881–90, I:18–19).

³ Entfaltung der Gedankenreihe in betreff der Bedeutung der Wörter (Reisig, 1890:1), and to provide eine Herleitung der übrigen Bedeutungen von der ersten, logisch und historisch geordnet (p.2).

writing of dictionaries and this involved ordering word meanings in lexical entries based on truly semantic principles. It seems that no better method than relying on logico-classificatory apparatus could have been introduced in those circumstances. Consequently, the same approach was applied to the study of meaning change. It involved classification of general types or rules of semantic change at the word level, taking phonetic laws as a model and not trying to find out what actually caused individual changes as such. Reisig (1881–90) perceived thoughts and feelings as independent of language and, as a consequence, the study of semantic change could only mean the study of the development of ideas or thoughts incorporated in the words themselves, disregarding extralinguistic factors. The development of thought followed logical principles and the task of semasiology was to show how the various meanings of a word arose from the original meaning. The approach received the name *logical* due to the fact that it employed logical relations between primary and secondary meanings, figures of speech, as well as two general semantic rules,⁴ that is restriction and generalisation (extension) of meaning, as tools to classify types of semantic change, which involved subordinating it to logic and conceptual apparatus of classical rhetoric.

Notice that Reisig's semasiology in addition to showing the tendency to abstraction and generalisation, also stressed the fact that language is dynamic in nature and has the capacity to develop new concepts, e.g.:

If a person wished to use a language only insofar as certain items were used by good authors in this language, because through these the necessary concepts in the language had been given and expressed, this would be confining the use of the language and even limiting its intellectual function, for then it would have to be supposed that nobody could bring new concepts to light in this language (Reisig, 1839:299).⁵

We should not forget, however, that there were also other revolutionary ideas of Reisig's which had to wait almost two centuries to be finally acknowledged as important linguistic concepts by cognitive grammar. These included treating semasiology and syntax as one entity; placing the figures of speech such as synechdoche, metonymy, metaphor in the central position within his theory of language and focusing on complete word groups rather than

⁴ Later on a third logico-rhetorical rule, that is **transfer of meaning**, was added by Tobler (1860) who studied and classified the transitions between concepts. He perceived transfer of meaning as a semantic change from one conceptual sphere to another, whereas restriction/ extension was limited only to the same conceptual sphere.

⁵ Wollte man sich einer Sprache bedienen nur in so weit, als gewisse Gegenstände behandelt sind von guten Schriftstellern in dieser Sprache, weil durch diese die erforderlichen Begriffe in der Sprache gegeben und gehandhabt worden wären, so hiesse diesses, den Gebrauch der Sprache beschränken, ja sogar die Geistesthätigkeit hemmen; denn dann müsste vorausgesetzt werden, dass Keiner in dieser Sprache neue Begriffe zu Tage fördern könnte [...] (Reisig, 1839:299).

analysing individual Latin words in isolation. Nevertheless, Gordon (1982:3) believes that Reisig's pioneering effort in the study of word-meaning was less remarkable in itself than in the attention it drew and influence it exerted upon later works on semantic change that followed.

A socio-historical approach

The school of hermeneutics, whose main task was the interpretation of biblical texts and the works of Friedrich Schleiermacher (1768–1834), in particular, influenced the historical approach to the study of semantic change pushing the search for its motives in the direction of external conditions, mostly historical and social or cultural. Notice that already Reisig (1881) stressed the importance of studying in depth the Latin texts and of taking into consideration the particularities of the Roman nation.

Another important source of inspiration came from the *éminence grise* of German semasiology, the philosopher Wilhelm von Humboldt (1767–1835) and his dynamic view of language.⁶ Among others, Ludwig Tobler (1827– 1895) in his etymological investigations sought to provide systematic principles for the transitions between concepts. Following Humboldt (1836), he believed that the vocabulary of a nation represents its framework of thought and that the original meanings of word roots constitute the inner form of language. Also, Friedrich Haase (1808–1867) stressed the historical point of view in his desire to discover how the genius of an individual nation expresses itself in the language and how it evolves, but unlike Reisig, Haase (1874–80) set about studying the laws that govern the semantic change with no reference to logic and instead of deducing them from general logical principles of the human mind, he attempted to induce them from historical records.⁷ Haase. therefore, speaks only of the natural or historical and consequently changeable, not the logical and eternal semantic change rules. Seen from this perspective, semantic change is a manifestation of historic progress in the life of the language.⁸

⁶ Humboldt (1836) accepted Kant's view of the mind as an active shaper of experience, but argued that the organising principles were contingent to language which was perceived as a dynamic force capable of making infinite use of finite means. His idea of *Weltanschaung* or worldview being embodied in a language implied that the organising principles of experience are not a universal feature of human cognition but are to be found in particular languages. He believed that language was a creative act of the individual and that humans had an innate capacity for language.

⁷ See Haase (1874–80:128).

⁸ It is worth mentioning that this progressive view was not shared by other 19th century scholars who regarded linguistic change as decay, for example Littré (1888) described words that change their meaning as *aberrations* or *illnesses*.

Haase (1874–80) offers a hypothesis on how semantic change takes place which, from the present point of view, one might venture to call *cognitive* since he claims that the only explanation for it can be sought solely in conceptual processing. In his own words:

Up until now we have considered meaning in relation to form, with which it is closely bound, like the soul and the body. But this connection can be suspended; the meaning can be considered for itself, and then it is no more than the concept itself for which the word is the symbol. When this concept changes without its symbol changing concurrently, then this is evidently a change. This change comes **only** from man's thoughts, in which the concept itself continues and passes through various moments and shapes. These are necessary in a natural connection and must maintain a unity (Haase, 1874–80:127).⁹

An entirely different view on language was presented by Richard Chenevix Trench (1807–1886) who claimed that the power to name things and language in general was a divine gift.¹⁰ In his *On the Study of Words* (1851) while dealing with semantic change, Trench intended it to be, at the same time, a lesson in changing morals and history. It is worth pointing out that his moralistic and historical approach to semantic change became slowly dominant in England. Language was, for Trench (1890[1851]:48) *a collection of faded metaphors* and words were treated as *fossilised poetry*. The range of problems he tackled in his writings included the **pejoration** and **amelioration** of meaning, although the terms themselves were not used; the modification of meaning in borrowed words; the changes of meaning due to politics, commerce, the influence of the Church. In 1857 Trench gave two papers to the *Philological Society* in which he enumerated various deficiencies of existing dictionaries and insisted on the introduction of the historical method.

An interesting application of socio-historical method for analysing semantic alternations was put forward by another English scholar – Archibald Henry Sayce (1846–1933) who considered comparative philology to be a wholly historical science and believed its goal was *to trace the development of the human intelligence as expressed in the outward and enduring monuments of speech*.¹¹ The task of comparative philology was therefore to study *the linguistic relics of social*

⁹ Wir haben bisher die Bedeutung immer im Verhältniss zur Form betrachtet, mit der sie wie Seele und Leib innig verbunden ist. Aber diese Verbindung kann auch aufgehoben, die Bedeutung kann für sich betrachtet werden, und dann ist sie nichts weiter als der Begriff selbst, für den das Wort das Zeichen ist. Wenn sich nun dieser Begriff ändert, ohne dass sich zugleich sein Zeichen ändert, so ist dies offenbar eine Veränderung, die nur aus dem Denken des Menschen hervorgeht, in welchem der Begriff selbst sich fortbewegt und verschiedene Momente und Gestaltungen durchläuft, die nothwendig in einem natürlichen Zusammenhange stehen und eine Einheit behaupten müssen (Haase, 1874–80:127).

¹⁰ It is hardly surprising as Trench was a Dean of Westminster and later Archbishop of Dublin.

¹¹ See Sayce (1875:XVI).

*change and thought.*¹² As language was anchored in intelligence and society, philology became archaeology of the mind. For Sayce the true source of semantic change was **analogy** functioning on the principle of association of ideas, e.g.:

To make our meaning plain to another, it is necessary that we should employ words which he understands, and we can only convey a new idea to him by comparing and likening it to one with which he is already familiar. Indeed, it is not only in the instruction of others, but just as much in the development of our knowledge, that the same contrivance is required. One idea is best remembered by being connected with another idea, no matter how fanciful the connection may be; and it would be quite impossible to recollect a large mass of isolated ideas. Knowledge is one vast chain of associations; and analogy is the principal forger of its several links. [...] Language is the treasure-house of worn-out metaphors (Sayce, 1875:374).

In other words, for Sayce language is a social, not individual phenomenon. It interprets the society of the past and is interpreted by the society of the present; it starts with the sentence, not with the word and, in general, should be perceived as an expression of thought

A biologico-evolutionary approach

A group of French and Belgian linguists, which is often referred to as the French ideology, including Honoré Chavée (1815–1877), Abel Hovelacque (1843– 1896), Julien Vinson (1843-1926), Lucien Adam (1833-1918), Paul Regnaud (1838-1910) among others, believed linguistics to be a natural science and language an organism that is born, develops, experiences a brief moment of evolutionary perfection, degenerates and dies. The linguists, influenced by Charles Darwin's (1809–1882) theory of evolution, defined the study of semantic change as the science of the syllabic organisms of thought, which are to each other like the races who have spontaneously created them.¹³ The word spontaneously should be stressed here as the group adopted a view that semantic changes are determined by natural laws quite independently of any involvement on the part of speakers. They made the basic assumption that language lives, evolves and decays and that is manifested not only in semantic, but also phonetic change. This approach, where semantic change is the natural result of the life and interaction of words, is wholly consistent with August Schleicher's (1821-1868) naturalism as well as with the positivism and empiricism of that time.

A constant use of expressions and metaphors describing semantic change in terms of evolution and biological processes was a characteristic feature of Arsène Darmesteter's (1846–1888) research who was the first to put forward a programme

¹² Ibid.

¹³ La science des organismes syllabiques de la pensée, lesquels sont entre eux comme les races qui les ont spontanément créé (Chavée, 1878:XI).

for French semantics. He wrote that *the absolute truth of the Darwinian theory as applied to* [...] *language evolution by natural selection is a fact.*¹⁴

The idea of language being in constant evolution was also shared by Emile Littré (1801–1881). For him, the main feature of a language was that it can never be fixed as it evolves all the time so that new thoughts could be expressed. In his booklet entitled *Comment les mots changent de sens* reprinted in 1888 with a preface by Bréal, he presented his theory claiming that change is illness, but the language heals itself – metaphorically speaking – by its own therapeutic means. Words that change their meaning, however, were regarded as aberrations or ailments of language.

A psychological approach

The psychological tradition in semasiology was initiated by the work of Moritz Lazarus (1824–1903) and Heymann Steinthal (1823–1899) in the early 1860s. Steinthal tried to refute the belief that language is governed by logical principles and that grammar is rooted in logic, instead, he claimed that language is based on psychological principles, and these principles are mainly of a semantic kind. Steinthal and Lazarus (1884) drew their inspiration from the new mathematical and mechanistic psychology of Johann Friedrich Herbart (1776–1841) who defended the thesis that the facts of experience, with which psychology is concerned, are to be explained not by reference to what he termed *faculties*, but by reference to the laws governing the combination and interaction of those ultimate mental states described as sensations, images, ideas or presentations. Thus, the process of semantic change is based on *apperception* which was to be understood as the process of assimilation of new ideas and forming larger systems.¹⁵

While Steinthal and Lazarus tried to apply psychological theories to study semantic change, Wilhelm Wundt (1832–1920) wanted to gain insights into collective psychological phenomena from the linguistic investigation. His views on language can be summarised by the following quotation:

The language reflects first and foremost man's world of representations. The changes of word meanings reveal the laws governing the change of representations under the influence of changing conditions of association and apperception. In the organic structure of the language, in the construction of the parts of speech, that regularity reveals itself which governs the combinations of representations under the conditions of nature and culture particular to the speech community (Wundt, 1922[1900], I–1:37).¹⁶

¹⁴ See Darmesteter (1886:19), English edition.

¹⁵ The first linguist to base his analysis of semantic change on the psychological method proposed by Steinthal and Lazarus was Max Hecht (1857-?) who applied it to Greek semasiology.

¹⁶ In der Sprache spiegelt sich zunächst die Vorstellungswelt des Menschen. In dem Wandel der Wortbedeutungen äußern sich die Gesetze der Veränderungen der Vorstelungen, wie sie unter

Notice that both Wundt and Steinthal use the term *apperception*, but in the case of Steinthal it is borrowed from Herbart, whereas for Wundt the term *apperception* is understood in the sense given to it by Gottfried Wilhelm Leibniz (1646–1716), where it meant an inner act of the will which regulated association. On the whole, Wundt rejected Herbart's intellectualism and focused on psychological importance of will and action stressing the role of voluntarism in the processes of semantic change. In consequence, the laws of semantic change are based on the general laws of association. The voluntary involvement of the will in the creation of new ideas was also emphasised by Frédéric Paulhan (1856–1931) who expressed the following opinions on language, e.g.:

Rather than being an instrument for the communication of the state of our soul, language becomes an instrument to make somebody think, feel and act according to our wishes. [...] The mind gives words a meaning and to a certain extent it creates that meaning. Language provides the mind not with the sign of a reality, but with an occasion, a sort of pretext to invent, to form new ideas (Paulhan, 1927:22–24).¹⁷

The main principle of language change is for Paulhan (1927) association by resemblance in sound or sense, or analogy. Fair enough, the importance of analogy was also recognised by neo-grammarians, but while they gave the primacy to sound change, Paulhan regarded semantic change as the main type of language change. Significantly, unlike other linguists, Paulhan knew that it is not only important to understand why and how words change, but also how and why they stay the same.

Herbart's psychology of representation and Wundt's psychology of association were later replaced by Sigmund Freud's (1859–1939) psychoanalysis, especially of the type established by Carl Gustav Jung (1875–1961). The linguist who applied this new approach to the study of semantic change was a Swedish scholar Hans Sperber (1885–1960?) for whom the driving force in the process of meaning transformation was the emotional charge with which a word can be loaded. He claimed that on this charge depended the replacement of one meaning by another. In his own words:

If at a certain time a given complex of representations is so heavily charged with emotions that it drives one word beyond its original meaning and forces it to adopt a new meaning, [...] we can expect with certainty that this same complex of representations will also force other

dem Einflusse wechselnder Assoziations und Apperzeptionsbedingungen stattfinden. In dem organischen Aufbau der Sprache, in der Fügung der Redeteile gibt sich die Gesetzmäßigkeit kund, von der die Verbindung der Vorstelungen unter dem besonderen Natur- und Kulturbedingungen der Sprachgemeinschaft beherrscht wird (Wundt, 1922[1900], I–1:37).

¹⁷ Le langage plutôt qu'un moyen de communiquer notre état d'âme, devient un moyen d'amener autrui à penser, à sentir et à agir selon que nous le désirons (Paulhan, 1927:22). Le langage apporte à l'esprit non pas le signe d'une réalité, mais une occasion, une sorte de prétexte à inventer, à former des idées nouvelles ... (p.24).

expressions that belong to it to transgress their sphere of use and thus develop new meanings (Sperber, 1923:67).¹⁸

The quotation given above shows that one change of meaning can bring about a chain reaction causing other words to undergo the same process while transgressing into a new lexical field. This happens when we apply the language of computers to describe human brain and its intellectual capacities calling the head hardware, the mind software, the communication between people interface and a clear instruction user-friendly. An example of semantic change, or Bedeutungswechsel as he calls it, given by Sperber comes from German.¹⁹ He wants to know where the energy or emotional charge for the replacement of houbet (Haupt – 'head') by the word Kopf – 'head' came from. His observations seem to indicate that Kopf was first used in a military language where it had secondary associations and emotional values that were charged with more energy than the word Haupt. Sperber formulated a hypothesis that the replacement of one meaning by another or of one word by another depends first of all on their affective charge. And so, the word Kopf could replace the word Haupt because it became firmly integrated into the jargon of soldiers and then passed into the standard language and gained frequency of usage. Sperber claimed that if a word, charged with a new meaning, can be integrated into an already existing semantic field, or - in his terminology - complex of *representations*, it has the best chances in the struggle for survival.

A functional and contextual approach

Philipp Wegener (1848–1916), like his French colleagues Michel Bréal (1832–1915) and Gaston Paris (1839–1903), emphasised the function of words and sentences and the influence of the communication process on them. Wegener (1885) put forward a unified theory of language acquisition, language use and language change based on strategies, procedures, schemata and models, employed in the interaction between speaker and hearer in the context of situation. What is more, he postulated that the speaker's and hearer's interferences, mental schemata, the process of problem-solving and the use of analogies play the crucial part in the functioning of language. According to his theory, both the speaker and hearer have at their disposal certain schemata for

¹⁸ Wenn zu einer bestimmten Zeit ein Vorstellungskomplex so stark affektbetont ist, daß er ein Wort über seine ursprüngliche Bedeutung hinaustreibt und es veranlaßt, eine neue Bedeutung anzunehmen, [...] mit Bestimmtheit zu erwarten ist, daß derselbe Vorstellungskomplex auch andere ihm angehörige Ausdrücke zur Überschreitung ihrer Verwendungssphäre und dam it zur Entwicklung neuer Bedeutungen treiben wird (Sperber, 1923:67).

¹⁹ See Sperber (1923:30–31).

the construction and reconstruction of meaning. These are schemata of time, space and movement; actions follow each other in time, take place in some context, have purpose and are executed according to some rules and sequences. In case we lack a schema, we can build a new one in analogy with already known ones. In Wegener's (1885) model, words do not carry meaning, but they absorb meaning from the context or the intention of the speaker and the understanding by the hearer. The interpretation of sentences is based on conclusions or interferences drawn from the context and the meaning emerges from communication as situated action.

In the works of Philipp Wegener and – to some extent – Johann Stöcklein and Hermann Paul (1846–1921), the meaning of words is gradually detached from its etymological ties and perceived as a result of contextual language use. It was believed to be created anew in each act of communication and regarded as context-dependent, consequently it was possible to differentiate between *usual* and *occasional* meaning (see Paul, 1891:65).

Another contextual theory of semantic variation and change was developed by a British psychologist of the early 20th century George Frederick Stout (1860– 1944), a forerunner of *Gestalt* psychology. The meaning of words is for him not, as many German psychological semanticists held, a representation or mental image associated with a word, but a conceptual system, formed and shaped by other systems and controlled by the topic of the discourse. He explains the fact that words have occasional apart from usual meanings in the following manner:

Each expressive sign has power to objectify its associate system only in so far as this system is capable of being incorporated in the conceptual whole which is in process of construction. Hence, the signification of words varies according to the context in which they appear. [...] The usual or general signification is not in itself one of the significations borne by a word. It is a condition which circumscribes within more or less vague and shifting limits the divergence of occasional meanings (Stout, 1891:194).

Semantic change is accounted for by him in terms of the mutual shaping of word-meanings, themselves viewed as small conceptual systems forming part of larger structures, such as the sentence and discourse. Word-meaning is seen as a rather fuzzy territory delimited vaguely by the usual meaning, but always retracted and reshaped by the use of words in discourse and in situation, which gives them their occasional meanings.

The French historical comparative linguist Antoine Meillet (1866–1936) studied semantic change as a function of changes in social groups and generations of speakers. His student, Kristoffer Nyrop (1848–1931), continued to work within this sociological framework but also stressed that changes in the meanings of words are dependent on the psychological constitution of the speaker, and on the co-context and context in which words are used. This context-dependency brings about what Nyrop (1913) called the *relativity of meaning* defined along the following lines:

The meaning of words is not absolute. [...] Their semantic value depends on the whole and can differ in many ways. As the word has commonly no isolated existence, one should study it, so to speak, 'in function', and one should not only take into consideration the surrounding words, but also the concomitant circumstances, because otherwise one will not arrive at a correct conception of the meaning it represents (Nyrop, 1913:15).²⁰

According to Nerlich (1992:258), the works of Alan Henderson Gardiner (1879–1963) and John Rupert Firth (1890–1960), influenced by Bronisław Malinowski's (1884–1942) research and often referred to as the British contextualism, represented a last linguistic attempt at explaining change of meaning by *use* and *context*. After that semantics drifted more and more away from a diachronic towards a more structural and synchronic perspective initiated by the founder fathers of structuralism. The crowning achievement of this period, sometimes even considered anachronistic,²¹ was a monumental work on semantic change published in 1931 by the Swedish philologist Gustaf Stern entitled *Meaning and Change of Meaning, with Special Reference to the English Language*. For Ullmann (1962:7), Stern's monograph represents a synthesis of the 19th century linguistic investigations of causes and laws of semantic change.²² It must be stated, however, that Stern did not align himself with any particular school of thought, nor any of his individual predecessors.

Structuralism

The 1930s and 1940s witnessed the rise of structural linguistics. The revolution was launched by Ferdinand de Saussure (1857–1913) in Switzerland, and was developed by Nikolaus S. Trubetzkoy (1890–1938) in Vienna, Vilem Mathesius (1882–1945) in Prague, Viggo Brøndal (1887–1942) and Louis Hjelmslev (1899–1965) in Copenhagen and by Edward Sapir (1884–1939) and Leonard Bloomfield (1887–1949) in the United States. Saussure in his *Cours de linguistique générale* published in 1916 opposed to the previously widespread view that linguistics must be historical and – as a consequence – pushed the problem of semantic change to the periphery of linguistic interests where it stayed for several decades. Instead, Saussure introduced the distinction between **synchrony** and **diachrony** and argued that the synchronic description of particular

²⁰ Le sens des mots n'est pas absolut. [...] leur valeur sémantique depend de l'ensemble et peut se nuancer de beaucoup de maniéres. Comme le mot ordinairement n'a pas d'existence isolée [...], il faut l'étudier pour ainsi dire 'en fonction', et il faut prendre en consideration non seulement les mots environnants, mais aussi les circonstances concomitants, sans quoi on n'arrivera pas à une juste notion du sens qu'il reprêsente (Nyrop, 1913:15).

²¹ See Gordon (1982:51).

²² The 19th century tradition of historical semantics was later also continued by Stephen Ullmann (1914–1976).

languages could be equally scientific and explanatory. He believed that all changes originated outside the language system itself. Nevertheless, Lyons (1981:218) draws our attention to the fact that Saussure was not at all denying the validity of historical explanation and never abandoned his interest in historical linguistics considering the synchronic and diachronic modes as complementary.

On the whole, structural linguists aimed at defining linguistic units in terms of their relations to one another, i.e. in analytic operations that exhibit those relations. Semantic intuitions did not seem to be amenable to objective control. Bloomfield (1933:139–57), for example, was deeply troubled about the linguist's unavoidable reliance on semantic information. He regarded it as a serious weakness and could see no remedy for it. Warren (1992:11) maintains that Bloomfield perceived semantic change as some meaning being transformed from one word form to another, or to put it in a different way, he excluded the possibility that an existing word form may take on an unexpressed meaning. Bloomfield (1933) gives an example of how extension can take place by discussing the narrowing of meaning in the case of *meat* originally referring to 'food'.

Field theory approach

In the 1930s Jost Trier (1894–1970) published a series of articles on semantic field theory which opened a new phase in the study of semantic change.²³ He claimed that:

[...] individual words in a language do not stand alone but are arranged in meaning-groups. We are not referring here to an etymological group, at least not to those words which are grouped with hypothetical roots, but rather a group in which the conceptual contents of its members are all inter-related. This connection is not intended as a mutual ordering for a chain of associations but as such that the whole group marks out a semantic field which is internally structured. Here, as in a mosaic, words fit together, each with different contours and such that the contours fit and all together the words do not reduce to a useless abstraction but merge into a conceptual unity (Trier, 1932:418–19).²⁴

²³ The notion of *field* was very popular at that time in physics, where it was used in the study of magnetic fields, gravitational fields, electric fields and particle fields. The term *semantic field* was first used by G. Ipsen in 1924 (see Ullmann, 1962:244), but Trier is generally regarded as the most important and influential of the German *field linguists*.

²⁴ Die Eigenwörter stehen in einer Sprache nicht allein, sondern sind eingeordnet in Bedeutungsgruppen; damit ist nicht eine etymologische Gruppe gemeint, am wenigsten um chimärische Wurzeln aufgereihte Wörter, sondern solche, deren gegenständlicher Sinngehalt mit andern Sinngehalten verknüpft ist. Diese Verknüpftung aber ist nicht als Aneinanderreihung an einem Assoziationsfaden gemeint, sondern so, dass die ganze Grupp ein Bedeutungsfeld absteckt, das in sich gegliedert ist wie in einem Mosaik fügt sich hier Wort an Wort, jedes anders umrissen, doch so, dass die Konturen aneinander passen und alle zusammen in einer Sinneinheit höherer Ordung auf, nicht in einer faulen Abstraktion untergehen (Trier, 1932:418–19).

In brief, the theory claims that words make part of lexical fields which in turn cover conceptual fields. The meaning of a word depends on which area of a field it covers and on relation it has with its neighbours or – in other words – it depends on commutable delimitation. If a word changes its meaning, this will necessarily result in modifications to the whole system affecting the meanings of words in the same field. Therefore, in investigations of semantic change, the object of study should be lexical fields and not words in isolation. Trier's monograph on terms of knowledge and intelligence published in 1931 was one of the first attempts to introduce Ferdinand de Saussure's ideas into semantics. From Saussure Trier (1932) drew the principle of language as a system of oppositions which was encapsulated into the perception of language as an organic whole and a dynamic system borrowed from Humbolt and advocated in biologico-evolutionary approach. The very field view of meaning was also not completely new as, according to Gordon (1982:70), it can be traced back to the work of such scholars as Haase and Heerdegen.

Weisgerber (1927, 1962) developed further the theoretical basis of Trier's field theory concept and, therefore, the theory is frequently referred to as Trier-Weisgerber theory. In contrast to the 19th century historical-philological approach where, as it was shown, language was mostly viewed as a form of self-expression of an individual or community, and meaning as a psychological phenomenon, Weisgerber (1927) strongly objected to this atomistic and historically-oriented method. Instead, he stressed that the nature of meaning is linguistic not psychological and semantics can say nothing about psychological phenomena which bear on language.²⁵ Svensson (1997:6) notes that in Weisgerber's view, whatever extralinguistic knowledge is accessible to language speakers is encyclopaedic and, therefore, distinct from linguistic knowledge. Meaning, on the other hand, was no longer seen as being anchored in the etymological or diachronic ancestry of a word, but as emerging from synchronic relations between words in a field.

Generative linguistics and componential analysis

Chomsky's system of transformational-generative grammar was put forward in the late 1950s as a reaction to the previously dominant Bloomfieldian linguistic behaviourism. Lyons (1981:210) points out that generativism developed a particular version of structuralism and, that is why, it was

²⁵ Similarly Edmund Husserl's (1859–1938) phenomenological analysis and its antipsychologism also reinforced the structuralist point of view that semantic fields should be studied in themselves and for themselves and not with reference to psychological concepts or real world objects.

characteristic of generative linguistics to see language change as a secondary issue far from the mainstream of linguistic studies which were focused on synchronic aspects of language. The almost forgotten at that time issue of semantic change, in very few studies devoted to the problem, was analysed in terms of the addition, loss or reordering of the rules that determine a speaker's linguistic competence. For example, McLaughlin (1970) states:

In dealing with semantic change, we will need to be concerned both with the nature of lexical entries in the dictionary and the operation of projection rules. It seems reasonable to suppose that changes in the first will cause changes in the second. Specifically, change in a lexical entry may be characterized by changes in the syntactic markers, the semantic markers, the distinguishers, the selection restrictions, or any combination of these. For any given, new markers, distinguishers, or restrictions may be added, while old ones may be lost (McLaughlin, 1970:287f).

In so far as the competence/performance dichotomy can be identified with the langue/parole distinction of Saussurean structuralism, the contribution made to the theory and methodology of historical semantics by generativists can be seen as a refinement and development of the structuralists' conception of language change. Preference was given to what was classified as internal factors and disregarding or marginalising extralinguistic causes. Without doubt, Chomsky's analysis of language was determinedly and pragmatically abstract. He did not direct his attention towards the ways in which language was used in society, but instead sought to address *the ideal speaker-hearer in a homogeneous speech community*. Of course there is no such a person as an ideal speaker-hearer and all speech communities, far from being homogeneous, are self evidently heterogeneous. On the whole, the structuralists' notion of self-regulation has been replaced with that of the restructuring of the rules of the language system. Generativists were also much interested in the problem of language acquisition by children.²⁶

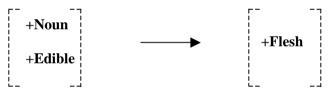
The idea that semantics could be handled in terms of components was argued with the investigation of kinship terms.²⁷ Loundsbury (1956:158) observed that in Spanish, for instance, the sex of the people involved is clearly marked with the -o ending for male and -a for female as in: tio – 'uncle', tia – 'aunt'. It was noted that it could be possible to classify kinship terms with reference to categories such as sex, generation differences and degrees of relationship. Given these three sets of criteria all the English kinship terms could be described in terms of components –

²⁶ They stressed the fact that the child who begins to acquire his native language is not taught the rules of the underlying system, but must infer these rules from the patterns of correspondence between form and meaning which he detects in the utterances that he hears around him. They also postulated the existence of the so-called language faculty independent of other mind components (see Chomsky, 1965:56).

²⁷ Componential analysis owes much to structuralist phonology. It was based on Hjelmslev's (1943) conviction that a linguistic sign can be decomposed into smaller semantic units which he called *figurae*.

the total meaning of a word being seen as a number of distinct elements. Cassirer (1956:56) suggested that the postulation of a concept of distinctive features originates in a universal characteristic of thinking and Nida (1951) introduced a coherent terminology for the description of meaning in componential terms. All lexemes in all languages are perceived as complexes of universal atomic features called **semes**, **semantic primitives** or **primes**; comparable with the distinctive features of phonology constituting phonemes.

Voyles (1973) took the grammar of Katz and Postal (1964) as his point of departure and tried to account for the underlying operations involved in the process of semantic change. His repertoire of analytic concepts included semantic features, lexical insertion rules, projection rules and semantic redundancy rules. He proposed that words can change their meanings because semantic features can be added and deleted by the insertion rules and redundancy rules. Projection rules, on the other hand, operate on lexical entries and combine the semantic readings of various lexical items until a semantic interpretation of the entire sentence is produced. Voyles accepts the standard generative position that there is a restricted set of semantic features and that no new features can arise. The well-known example of narrowing of meaning, where *meat* changes its original O.E. meaning 'food', is claimed to be a situation of obligatory Feature Addition rule application:²⁸



Apart from Voyles'(1973) componential account for semantic alterations, Görlach (1974), Leech (1974), Werth (1974), Berndt (1982) and Kleparski (1990) are the very few scholars who employed feature notation in the description of sense developments. Especially a well-developed Kleparski's (1990) approach is worth taking a closer look at. While investigating evaluative developments in the domain of HUMANS, the author attempted to arrive at some regularities concerning semantic change in general. Analysing a particularly copious growth of negatively, as well as less numerous positively loaded group of lexical items referring to both women and men in English, he concludes that evaluative developments assume gradual and directional character. It is evidenced by the possibility of specifying diverse stages especially in the pejorative developments affecting HUMANS. Kleparski (1990) distinguishes four stages: (1) social pejoration, (2) aesthetic pejoration, (3) behavioural pejoration and (4) moral pejoration. Describing the changes in

²⁸ See Voyles (1973:110).

meaning as directional was based on his observations that, e.g., the presence of socially negative elements in a given structure often precedes the association of a given lexical unit with behaviourally negative elements or morally negative elements. In the analysis of semantic development he employs three types of components (see Kleparski, 1990:48):

- a) common, e.g.: +OBJECT, +COUNTABLE, +ANIMATE, +HUMAN;
- b) diagnostic, e.g.: (+MOVEMENT), (+MALE), (+ADULT), (+MISERABLE);
- c) supplementary, e.g.: /+OLD/, /+MOUNTED/, /+MILITARY/, /+POLITICAL/;

and the various processes operative in the development of meaning such as: component addition, component loss, change of component type – weakening or strengthening, change of component value, component adjustment and component substitution.²⁹ A representative example of the way Kleparski (1990) analyses semantic change may be illustrated by the pejorative development of *boor*:

Stage A >	Stage B >	Stage C >	Stage D
+HUMAN (+MALE) ([COUNTRY [ORIGIN]])	+HUMAN (+MALE) ([COUNTRY [ORIGIN]]) ({UNREFINED UNMANNERED})	+HUMAN (+MALE) /[COUNTRY [ORIGIN]]/ ({UNREFINED UNMANNERED})	+HUMAN (+MALE) ({UNREFINED UNMANNERED})
addition	weakening	loss	

As evidenced by Kleparski (1990:108), **Stage A** roughly corresponds to the O.E. meaning 'countryman'. At the end of the 16^{th} century a new meaning developed: *boor* started to be used with reference to rustics with the strong implications of lack of refinement which was marked by Kleparski in **Stage B** as addition of behaviourally negative feature ({UNREFINED UNMANNERED}).

²⁹ The function of common components is to delimit boundaries of a particular semantic domain by stating the necessary and sufficient features. On the other hand, diagnostic components specify those characteristics of meaning which are shared by one or more, but not by all meanings in the same semantic domain. Finally, supplementary components serve to encode the bits of associative information that are not necessary, or significant, for establishing minimal contrasts.

Stage C represents the widening of meaning conditioned by the weakening of the diagnostic, socially evaluative component ([COUNTRY [ORIGIN]]), which was eventually lost in **Stage D** yielding the modern meaning of 'unrefined, unmannered person' with no elements to imply that the person must be countryborn.

Cognitive linguistics approach

A linguistic theory called cognitive grammar is mainly characterised by the notion of language being grounded in cognition. According to Langacker (1987), who is generally considered one of its principal contributors, cognitive linguistics is a very natural framework in the sense that its notions reflect man's basic cognitive abilities such as viewing, distancing, scanning or mental movement.³⁰ As has become manifest in recent research, for instance, on mirror neurons, cognition is an integrated human ability which cannot be separated from other functions. The holistic approach to language is explained by Taylor (1989) in the following way:

Whereas generativists regard knowledge of language as an autonomous component of the mind, independent, in principle, from other kinds of knowledge and from other cognitive skills, cognitivists posit an intimate, dialectic relationship between the structure and function of language on the one hand, and non-linguistic skills and knowledge on the other. Language being at once both the creation of human cognition and an instrument in its service, is thus more likely than not to reflect, in its structure and functioning, more general cognitive abilities (Taylor, 1989:ix).

Although Langacker (1999:172) withdraws any claim for explaining actual semantic change and admits that his analyses *have not been based on serious historical investigation*, the problem of semantic change received considerable amount of attention in works such as, among others, Sweetser (1990), Geeraerts (1983a, 1997), Kleparski (1997, 2002). In regarding language as a pragmatic and functional **continuum**, cognitive linguists transcend formerly irreconcilable dichotomies and present the relationship between *langue* and *parole*, synchrony and diachrony, form and function or literal and figurative language as gradual and interactive phenomena rather than incompatible poles. In this way, the

³⁰ Langacker (1987:134) states that *our cognitive ability to conceptualize situations at varying levels of schematicity is undeniable*. He defines viewing as the mental ability of visualising what an object looks like when seen from different angles or perspective, with direct consequences for its perceived proximity and salience. Cognitive distance, on the other hand, refers to a measure reflecting the number and likelihood of cognitive events needed to relate two notions, e.g. the degree to which a schema is elaborated by a particular instantiation: the distance between [THING] and [DOG] is greater than between [THING] and [ANIMAL]. Another cognitive ability – scanning – is an operation that relates a standard of comparison and a target, registering any discrepancy between them (see Langacker, 1987:492).

various grammatical levels and categories combine in an information continuum from semantics to pragmatics, from meaning to form.

Following the cognitive approach, Sweetser (1990:20–21) states that our experience and knowledge of the world model how we understand language and thought which, consequently, affects the way we express ourselves. She establishes three possibilities of how our linguistic expressions are shaped, each of the possibilities leading to a different domain:

a) as a description (model of the world)	Real world domain
b) as an action (an act in the world being described)	Speech-act domain
c) as an epistemic or logical entity (premise or	Epistemic domain
conclusion in our world of reasoning)	

These domains are not independent, but are linked by our *cognitive system*, and this link is carried out by *metaphor*. Sweetser believes that:

Using the idea of systematic metaphorical structuring of one domain (e.g. the epistemic domain) in terms of another (e.g. the sociophysical domain), cognitive semantics may well be equipped to make headway in the murky area of meaning-change, as well as in the area of synchronic semantic structure (Sweetser, 1990:21).

Adopting this view of mutual metaphorical structuring of domains, Sweetser claims that the paths of semantic change are multidirectional. They can lead from a concrete source domain to an abstract target domain, or in other direction; from the external (sociophysical) domain to internal (emotional, psychological) domain. In the case of perception verbs, chosen by Sweetser for analysis, these metaphorical mappings take place between the vocabulary of physical perception (external source domain) and the vocabulary of internal self and sensations (internal target domain). She establishes the following correlations pertaining to the paths of semantic change in the case of perception verbs:

VISION	\rightarrow	KNOWLEDGE
HEARING	\rightarrow	HEED \rightarrow OBEY
TASTE	\rightarrow	LIKES/DISLIKES
TOUCH	\rightarrow	FEELINGS
SMELL	\rightarrow	DISLIKEABLE FEELINGS

Thus, the verb *see* has two meanings, that is, 'physical vision' and 'knowledge'. The correlation is also visible in other languages: Pol. *widzieć* – 'to see' and *wiedzieć* – 'to know', Gk. *eidon* – 'to see' and perf. *oida* – 'know' (>Eng. *idea*); or in the opposite direction: Eng. *wise*, *wit* alongside the more physical *witness*.

Sweetser (1990:39) states that in this example the sense of vision is not only connected with the general experience or perception, but also with the overall mental capacities. The vision/intellection metaphor is very productive in modern English. Note that a physical object may be *opaque* or *transparent*, likewise an argument or a proposition may be *crystal-clear*, *opaque*, *transparent*, *muddy*, or *murky* to our mental vision. According to Sweetser (1990:45), such large scale conceptual metaphors are of the highest importance both for synchronic and diachronic semantic analysis and so, through a historical investigation of paths of semantic change, it is possible to elucidate synchronic semantic connections between lexical domains. The claim made here is that the linguistic research can be also conducted in the opposite direction.

In cognitive approaches the configuration of concepts is also typically seen as a configuration of prototypes. Just like Sweetser (1990) drew much of her inspiration from earlier studies on metaphor incorporating many of Lakoff and Johnson's (1980) ideas in her work, Geeraerts (1983,1997) applied the notions of prototypicality and family resemblance (in the sense of Wittgenstein and Rosch) to historical semantics. At the same time, the diachronic processes of language change corroborate the cognitive assumptions on categorisation while prototypical and radial models satisfy the demand of stability and flexibility. In this respect, *four structural features of prototypically organised semantic categories* are correlated with corresponding *hypotheses for semasiological change* formulated by Geeraerts (1997:23).

In his case study, Geeraerts (1983) considers the semantic development of Dutch *vergrijpen* from 1500 up to 1900 showing that meaning change exhibits characteristics that correspond to the structure of the prototype. The general picture of the changes in *vergrijpen* is one of clusters of interlocking and overlapping senses. There are two central meanings: 'to do something wrong' and 'to mistake', but even on the highest level of structural organisation, meanings combine and interrelate to form conceptual networks which, in Geeraerts' (1983:17) words, corroborates the thesis that diachronic semantics supports prototype theory.

Whereas Geeraerts (1983, 1997) focuses mostly on the nuances in a prototypical conceptual structure and their reciprocal configurations, Kleparski (1997) delves into the intricate mechanisms of semantic shift putting forward a comprehensive model of meaning change tested against a bulk of evidence comprising Mid.E. and E.Mod.E. synonyms of GIRL/YOUNG WOMAN. He stresses that semantic structures at all levels may be characterised relative to cognitive domains which he understands and refers to as conceptual domains, e.g.: DOMAIN OF SEX, AGE, FUNCTIONS, HABITATION. CHARACTER, etc. In the framework developed by the author, a lexical category receives its meaning by highlighting or being entrenched in particular locations within attributive paths of these domains, for example, Mid.E. vecke - 'old woman' is *core-entrenched* in the conceptual category <u>OLD FEMALE</u> <u>HUMAN BEING</u> while Mid.E. *maid* – 'girl, young woman' may be related not only to <u>YOUNG FEMALE HUMAN BEING</u>, but it is also claimed to be linked to different locations within the attributive paths of such conceptual domains as **DOMAIN OF SEXUAL ACTIVITY** and **DOMAIN OF FUNCTIONS**. The inclusion of two last domains makes the category a case of *complex entrenchment* and accounts for the additional meaning of 'virgin' and 'female servant' which the lexical item tends to indicate.

In terms of the mechanisms adopted by Kleparski (1997), the original semantics of Mid.E. *wench* – 'child of either sex' involves the entrenchment link to attributive path of **DOMAIN OF AGE** [...] and the highlighting of the appropriate value (VERY YOUNG) attended by highlighting of either of the two locations specified for the attributive path of **DOMAIN OF SEX** [...], i.e., (FEMALE) or (MALE). The change of meaning from 'child of either sex' into 'girl, young woman' takes place due to the highlighting of the value (YOUNG), coupled with the highlighting of the attributive value (FEMALE) and eclipsing of the originally highlighted (MALE). During the L.Mid.E. period, however, apart from the existence of a categorically central sense-thread 'girl, young woman', the semantic pole of *wench* started to be linked to the locations within the attributive paths of the **DOMAIN OF CHARACTER, BEHAVIOUR AND MORALITY** [...], on the one hand, and the **DOMAIN OF FUNCTIONS** [...] yielding the well-documented meanings of 'wanton woman' and 'female servant', respectively.

Conclusion

From the foregoing discussion of main frameworks and methodological approaches to semantic change we can draw the following observation. The study of semantic change has always been related to the theory of meaning in general, nevertheless, our outline shows that the 19th century scholars in particular put the question of meaning change high on their agendas and considered it to be vital for linguistic investigation. Therefore, their studies can be by no means ignored, otherwise scientific progress would represent a futile idea. This is merely one of the reasons why any reliable approach to semantic change cannot be carried out successfully without reference to the great linguistic achievements made in the field of semantics during the two past centuries.

References

Bloomfield, L. 1933. Language. New York: Holt.

Bréal, M. 1897. *Essai de sémantique. Science de significations.* Paris (5th edition, 1921). **Cassirer, E.** 1956. *Wesen und Wirkung des Symbolbegriffs.* Oxford: Oxford University Press.

Chavée, H. 1878. Idéologie lexiologique des langues indoeuropéennes. Paris: Maison-neuve.

- **Chomsky, N.** 1965. *Aspects of the Theory of Syntax*. Cambridge, Massachusetts: The M.I.T. Press (8th edition, 1972).
- **Darmesteter, A.** 1886. *La vie des mots étudiés dans leurs significations*. Paris: Delagrave. (10th edition, 1910); in English translation *The Life of Words as Symbols of Ideas*. London: Kegan Paul, Trench.
- Geeraerts, D. 1983. 'Prototype theory and diachronic semantics: A case study' [in:] *Indogermanische Forschungen*, vol. 88, pp. 1–32.

Geeraerts, D. 1997. Diachronic Prototype Semantics. Oxford: Clarendon Press.

- Gordon, W.T. 1982. A History of Semantics. Amsterdam/Philadelphia: John Benjamins Publishing Company.
- Haase, F. 1874–80. Vorlesungen über die lateinische Schprachwissenschaft, gehalten ab 1840. 2 vols. Leipzig: Simmel & Co.
- **Hecht, M.** 1888. *Die griechische Bedeutungslehre. Eine Aufgabe der klassischen Philologie.* Leipzig: Teubner.
- Hjelmslev, L. 1943. Omkring sprogteoriens grundloeggelse. Copenhagen: Lunos. (English edition: 1953. Prolegomena to a Theory of Language. Transl. By F.J. Whitfield. Supplement to Internal Journal of American Linguistics, vol. 19 no.1 Indiana Publications in Anthropology and Linguistics. Memoir 7. Baltimore: Waverly Press, Inc.).
- Humboldt, W.von. 1836. Über die Verschiedenheit des Menschlichen Sprachbaues; in English translation On Language. The diversity of human language-structure and its influence on the mental development of mankind. Cambridge: Cambridge University Press, 1988.
- Jespersen, O. 1925. Mankind, Nation, and Individual from a Linguistic Point of View. Oslo.
- Katz, J.J. and P.M. Postal. 1964. An Integrated Theory of Linguistic Description. Massachusetts: The M.I.T. Press.
- Kleparski, G.A. 1990. Semantic Change in English: A Study of Evaluative Developments in the Domain of HUMANS. Lublin: Redakcja Wydawnictw Katolickiego Uniwersytetu Lubelskiego.
- Kleparski, G.A. 1997. The Theory and Practice of Historical Semantics: The Case of Mid.E. and E.Mod.E. Synonyms of GIRL/YOUNG WOMAN. Lublin: The Catholic University of Lublin Printing House.
- Kleparski, G.A. 2002. 'Lusta, mint a disznó: a hunt for 'correlative' zoosemy in Hungarian and English' [in:] Grzegorz A. Kleparski (ed.), Studia Anglica Resoviensia 1: International English Studies Journal. Rzeszów: Wydawnictwo Uniwersytetu Rzeszowskiego.
- Langacker, R.W. 1987. Foundations of Cognitive Grammar, vol. 1, Theoretical Prerequisites. Stanford, California: Stanford University Press.
- Langacker, R.W. 1999. 'Losing control: grammaticization, subjectification, and transparency' [in:] Blank/Koch (eds) (1999) *Historical Semantics and Cognition*. Berlin/New York: Mouton de Gruyter, pp. 147–176.
- Lakoff, G. and Johnson, M. 1980. *Metaphors We Live By*. Chicago/London: The University of Chicago Press.
- Lakoff, G. 1987. Women, Fire and Dangerous Things: What Categories Reveal about the Mind. Chicago & London: The University of Chicago Press.
- Leech, G. 1974. *Semantics. The study of Meaning.* Harmondsworth: Penguin Books Ltd., (2nd edition 1981, reprint 1990).
- Littré, E. 1888. Comment les mots changent de sens. Paris: Delagrave.
- Lounsbury, F.G. 1956. 'A semantic analysis of Pawnee kinship usage' [in:] *Language*, vol. 32, pp. 158–194.

- Lyons, J. 1981. Language and Linguistics. An Introduction. Cambridge: Cambridge University Press.
- Meillet, A. 1921[1905–1906]. 'Comment les mots changent de sens', pp. 230–271. [First published in the *Anée Sociologique* 9.1–38.].
- McLaughlin, J.C. 1970. Aspects of the History of English. New York: Holt, Rinehart and Winston, Inc.
- **Nerlich, B.** 1992. Semantic Theories in Europe 1830–1930. From Etymology to Contextuality. Amsterdam/Philadelphia: John Benjamins Publishing Company.
- Nida, E.A. 1951. 'A sytem for the description of semantic elements' [in:] Word, vol. 7, pp. 1–14.
- **Nyrop, K.** 1913. Sémantique. Grammaire historique de la langue française. Copenhagen: Gyldendalske Boghandel Nordisk Forlag.
- Paul, H. 1891. Principles of the History of Language. London: Longmans, Green, and Co.
- Paulhan, F. 1927. 'La double fonction du langue' [in:] Revue philosophique 104, pp. 22-73.
- Reisig, C.K. (1881–90) Vorlesungen über die lateinische Schprachwissenschaft. Ed. posthumously by Friedrich Haase. Erster Bd. Berlin: Calvary, 1881; Dritter Bd. Berlin: Calvary, 1888; Zweiter Bd. Berlin: Calvary, 1890. (1st edition, 1839. Leipzig: Lehnhold).
- Saussure, F. de. 1916. Cours de linguistique générale. Paris: Payot.
- Sayce, A.H. 1875. The Principles of Comparative Philology. London: Trübner (2nd edition).
- Schendl, H. 2001. Historical Linguistics. Oxford/New York: Oxford University Press.
- Schreuder, H. 1929. *Pejorative Sense Developments in English.* College Park, Maryland: McGrath Publishing Company (reprint 1970).
- Sperber, H. 1923. *Einführung in die Bedeutungslehre*. Bonn-Leipzig: Schroeder (2nd edition, 1930).
- Stern, G. 1921. Swift, Swiftly and their Synonyms: A Contribution to Semantic Analysis and Theory. Göteborg.
- **Stern, G.** 1931. *Meaning and Change of Meaning with Special Reference to the English Language.* Bloomington: Indiana University Press.
- Stout, G.F. 1891. 'Thought and language' [in:] Mind 16, pp. 181–197.
- Svensson, A.M. 1997. *Middle English Words for "Town": A Study of Changes in a Semantic Field*. Göteborg: Acta Universitatis Gothoburgensis.
- Sweetser, E. 1990. From Etymology to Pragmatics. Metaphorical and Cultural Aspects of Semantic Structure. Cambridge: Cambridge University Press (Cambridge Studies in Linguistics 54).
- **Taylor, J.R.** 1989. *Linguistic Categorization: Prototypes in Linguistic Theory*. Oxford: Clarendon Press, (2nd edition, 1995).
- **Tobler, L.** 1860. 'Versuch eines Systems der Etymologie. Mit besonderer Rücksicht auf die Völkerpsychologie' ZfVPs 1:5.349–387.
- Trench, R.C. 1851. On the Study of Words. London: Kegan Paul (21st edition, 1890).
- Trier, J. 1932. 'Sprachliche Felder'[in:] Zeitschrift für deutsche Bildung 8, pp. 417–27.
- **Ullmann, S.** 1962. *Semantics: An Introduction to the Science of Meaning*. Oxford: Basil Blackwell (reprint, 1967).
- Voyles, J.B. 1973. 'Accounting for semantic change' [in:] Lingua, vol. 31, pp. 95–124.
- Warren, B. 1992. Sense Developments: A Contrastive Study of the Developments of Slang Sense and Novel Standard Senses in English. Stockholm: Almqvist & Wiksell International.
- Wegener, P. 1885. Untersuchungen über die Grundfragen des Sprachlebens. Halle: Niemeyer (new edition, 1991 Amsterdam/Philadelphia: John Benjamins Publishing Company).
- Weisgerber, L. 1927. 'Die Bedeutungslehre Ein Irrweg der Sprachwissenschaft?' [in:] *Germanisch-Romanische Monatsschrift* 9, pp.161–83.

Weisgerber, L. 1962. Sprachliche Gestaltung der Welt. Düsseldorf: Schwann.

- Werth, P. 1974. 'Accounting for semantic change in current linguistic theory' [in:] J.M. Anderson, Ch. Jones (eds), pp. 377–413.
- Whitney, W.D. 1875. *The Life and Growth of Language: An Outline of Linguistic Science*. New York: Appleton; London: King.
- Wierzbicka, A. 1988. The Semantics of Grammar. Amsterdam: John Benjamins Publishing Company.
- Williams, J. 1976. 'Synaesthetic adjectives: a possible law of semantic change' [in:] *Language*, vol. 52, pp. 461–478.
- Wundt, W. 1922[1900]. Völkerpsychologie; Eine Untersuchung der Entwicklungsgesetze von Sprache. Leipzig: Kröner.