# 1

# Historical-philological Semantics

The first stage in the history of lexical semantics runs from roughly 1830 to 1930. Its dominant characteristic is the historical orientation of lexical semantic research; its main concern lies with changes of word meaning—the identification, classification, and explanation of semantic changes. Along these lines of research, a wealth of theoretical proposals and empirical descriptions was produced. Most of this has by now sunk into oblivion, however. In practical terms, the older monographs will be absent from all but the oldest and the largest academic libraries, and where they are available, there is likely to be a language barrier: most of the relevant works are written in German or French, languages that are not accessible to all. As a result, some of the topics that were investigated thoroughly in the older tradition are later being reinvented rather than rediscovered; we will see proof of this in later chapters.

An aspect of this lack of familiarity is also that the tradition is not known under a standard name. We could talk about 'traditional diachronic semantics', if we want to highlight the main thematic and methodological orientation, or about 'prestructuralist semantics' if we want to focus on its chronological position in the history of the discipline, but we will opt for 'historical-philological semantics'. First, if we think of philology in terms of comparative philology—the study of the genetic relationships between languages and the reconstruction of protolanguages—we will see presently that traditional diachronic semantics originated in the margin of the investigation into the historical links between languages. Second, if we think of philology as the study of the cultural and historical background that is indispensable for an adequate understanding of the crucial texts, literary and others, of a certain era, we will see that traditional diachronic semantics is similarly characterized by an interpretative conception of meaning—a conception that is concerned with discovering the meanings inherent in older language materials. But these things will become clear in the course of the chapter. To begin with, we must have a look at what came before historical-philological semantics.

## 1.1 The birth of lexical semantics

Lexical semantics as an academic discipline in its own right originated in the early nineteenth century, but that does not mean that matters of word meaning had not been discussed earlier. Three traditions are relevant: the tradition of speculative etymology, the teaching of rhetoric, and the compilation of dictionaries. Let us briefly see what each of the three traditions involves, and how they play a role in the birth of lexical semantics as an academic enterprise.

### 1.1.1 Speculative etymology

To understand the tradition of speculative etymology that reigned before the birth of comparative philology in the beginning of the nineteenth century, we have to go back to classical antiquity. In Plato's dialogue *Cratylus* (which may be regarded as the oldest surviving essay in the philosophy of language), Hermogenes argues with Socrates and Cratylus about the view that language is not conventional, but is rather subject to a criterion of appropriateness (Cratylus 383a, 383c-d, in the translation by Fowler 1963):

Cratylus, whom you see here, Socrates, says that everything has a right name of its own, which comes by nature, and that a name is not whatever people call a thing by agreement, just a piece of their own voice applied to the thing, but that there is a kind of inherent correctness in names, which is the same for all men, both Greeks and barbarians. [...] For my part, Socrates, I have often talked with Cratylus and many others, and cannot come to the conclusion that there is any correctness of names other than convention and agreement. For it seems to me that whatever name you give to a thing is its right name; and if you give up that name and change it for another, the later name is no less correct than the earlier.

According to the naturalist theory defended by Cratylus, the names of things should be 'right' in a very fundamental sense: they express the natural essence of the thing named. Why, for instance, is *theous* the name for 'god'? As one of many examples illustrating the non-conventional, non-arbitrary nature of words, Socrates explains (Cratylus 397d):

I think the earliest men in Greece believed only in those gods in whom many foreigners believe to day—sun, moon, earth, stars, and sky. They saw that all these were always moving in their courses and running, and so they called them gods (*theous*) from this running (*thein*) nature; then afterwards, when they gained knowledge of the other gods, they called them all by the same name.

Assuming that words are essentialist descriptions of the things they name, but at the same time taking for granted that the superficial form of the word as it has come down to us may hide its original constitution, etymological analysis takes the form of looking for the hidden original meaning of words. Although

Plato's dialogue *Cratylus* is rather inconclusive with regard to the issues it raises, this type of speculative etymology was fully accepted up to the birth of comparative philology. An example from the Middle Ages may indicate the level of fancifulness reached.

The etymologies for Latin *mors* 'death' suggested in antiquity associate the word either with *amarus* 'bitter' or with *Mars*, the god of war 'who inflicts death'. Medieval authors by contrast drew the explanation of the word from the realm of Christian theology. The fifth century treatise *Hypomnesticon* is the first to link *mors* to *morsus* 'bite', an etymology that would be repeated by many authors: for the human race, death became a reality when the serpent in the Garden of Eden persuaded Adam and Eve to take a bite of the forbidden fruit, and God subsequently expelled them from the earthly paradise for having eaten from the Tree of the Knowledge of Good and Evil.

For our contemporary understanding, etymologies such as these are funny in a double sense: humorous and fantastic. But why exactly are they unscientific? What is it that distinguishes a speculative etymology from a scientific one? Typically, the speculative etymologies have two specific characteristics: they are based on a comparison of meanings, taking a lot of licence with the forms involved, and the entities they compare are words occurring within the same language. Without much restriction on the formal transformations that the words would have to undergo, they try to reduce a given name to other existing words. The criterion for success is whether the meaning of the reconstruction fits that of the target word, not whether the link is formally plausible.

The etymological approach that fits into the comparative philological model that developed in the nineteenth century has exactly the opposite features. First, it is primarily based on a comparison of forms rather than a comparison of meanings, and second, it focuses on the comparison of related forms in different languages. Thus, a systematic comparison of Greek *theous* with words like Avestan *daēva* 'demon', Latin *deus* 'god', Old Irish *dia* 'god', Old Norse *tívar* 'gods', Old Prussian *deiw(a)s* 'god' suggests that these forms have a common Indo-European precursor. The origin of (for instance) the Greek word is not found in Greek itself, but in a protolanguage that can be reconstructed by comparing related forms. Moreover, such reconstructions are subject to formal restrictions: you can only align the Germanic form from Old Norse with the others if you can show that the word-initial *t* in Germanic regularly corresponds with a *d* in Latin, and similarly for the other languages. This is the notion of a sound law: the sound that we reconstruct as a *d* in Indo-European, and which shows up as *d* in Latin and other languages, surfaces on a regular basis as *t* in the Germanic languages. Hence, Latin *decem* 'ten' corresponds with English *ten*, Dutch *tien*, Gothic *taihun*.

So, the tradition of comparative philology with which scientific linguistics came into being in the late eighteenth and early nineteenth century straightforwardly rejected the type of thinking about word meaning that was part of the tradition of speculative etymology. But what then would be the place of diachronic lexical semantics in the new comparative paradigm? As an autonomous empirical discipline, linguistics comes into being as a form of historical research, and so, to begin with, the birth of historical linguistic semantics in the nineteenth century is merely one more aspect of the overall diachronic outlook of the first phase in the development of modern linguistics. However, the birth of semantics within that young linguistic science was not just a question of completeness, but also one of necessity. The study of meaning was not simply taken up out of a desire to study linguistic change in all of its aspects. Rather, a thorough knowledge of the mechanisms of semantic change appeared to be a prerequisite for adequate historical investigations into the formal aspects of languages—and, precisely, as a safeguard against curious and far-fetched etymologies of the kind we have been discussing. Let us have a look at an example to understand this argument better.

The methodology of comparative reconstruction requires that the word forms from different languages that are to be compared be semantically related. But such a relationship is not always obvious. For instance, throughout the older Germanic languages, there is a fairly systematic formal resemblance between words for the concept 'beech', and words for notions such as 'book' and 'letter'. Compare, for instance, Old High German *buohha* 'beech' and *buoh* 'book', or Old Saxon *bôka* 'beech' and *bôk* 'book, writing tablet'. Now, in order to justify a reconstruction of these forms as being related to the same Proto-Germanic root, their semantic relationship has to be clarified. In this particular case, an awareness of the frequently-occurring metonymical relationship between names for substances and the name of objects made of those substances (think of a glass, an iron, a cork, a paper) can be combined with archaeological evidence showing that wooden tablets were used for writing purposes. Considering a number of lexical forms as cognate requires that their semantic relationship can be plausibly established, and this in turn requires an overview of the regular mechanisms of semantic change (and of the historical context). As such, diachronic semantics was not merely taken up as an end in itself, but also as an auxiliary discipline for historical-linguistic reconstructions.

So, as a first factor in the birth of linguistic semantics, the age-old tradition of speculative etymologizing of word meanings was rejected in favour of an approach that would identify and classify regular mechanisms of semantic change: a good knowledge of such mechanisms would restrict fanciful seman-

tic derivations of the traditional type. But where to start? If this was the initial programme for lexical semantics, where could it start looking for those mechanisms? This is where the rhetorical tradition comes in.

### 1.1.2 The rhetorical tradition

Rhetoric—the skill of using language to achieve a certain purpose, in particular, to persuade people—was a traditional part of the school curriculum from classical antiquity through the Middle Ages up to modern times. From a modern point of view, you could compare it to courses in essay writing and public speech (applied pragmatics, to put it more abstractly). Rhetoric was one of the seven subjects of the *artes liberales*, the liberal arts, which consisted of a set of three, the *trivium*, and a set of four, the *quadrivium*. The trivium linked up with what we would now call 'the arts', the quadrivium with the sciences. Subjects in the trivium were grammar, dialectics, and rhetoric; and subjects in the quadrivium were arithmetic, music, geometry, and astronomy. Rhetoric itself was traditionally divided into five parts: invention (the discovery of ideas for speaking or writing), arrangement (the organization of the text), style (the formulation of the ideas), memorization, and delivery. From the point of view of semantics, it is the stylistic component that is particularly important. The tradition of rhetoric (which in practice takes the form of a long series of treatises and textbooks) developed a large number of concepts to identify specific figures of speech, or 'rhetorical tropes': ways of formulation that would embellish a text or attract the attention of the audience. Some of these figures of speech are formal in nature, like alliteration, the repetition of the same sound in the beginning of several successive words: think of Caesar's *veni, vidi, vici*. Others involve syntactical patterns, like asyndeton, i.e. the absence of conjunctions between coordinate phrases, clauses, or words (here as well, *veni, vidi, vici* provides an illustration).

But a number of tropes refer to lexical and semantic phenomena, like euphemism, the substitution of an inoffensive or less offensive word for one that might be unpleasant. In Latin, the word *penis* originally meant 'tail', and the first meaning of *vagina* is 'sheath (of a sword)'; in both cases, a word with neutral associations is used for a taboo-laden concept. Metaphor and metonymy in particular are two fundamental semantic phenomena that will appear again and again in historical-philological semantics and that loomed large in the rhetorical tradition. Here is the way in which metaphor is introduced in Quintilian's *Institutio Oratoria*, a first-century textbook that deeply influenced the medieval and Renaissance schools of rhetoric (Quintilian VIII.6.4–9, as translated in Watson 1856):

Metaphor is not only so natural to us, that the illiterate and others often use it unconsciously, but is so pleasing and ornamental, that, in any composition, however brilliant, it will always make itself apparent by its own lustre. If it be but rightly managed, it can never be either vulgar, mean, or disagreeable. It increases the copiousness of a language by allowing it to borrow what it does not naturally possess; and, what is its greatest achievement, it prevents an appellation from being wanting for anything whatever. [...] On the whole, the metaphor is a short comparison, differing from the comparison in this respect, that, in the one, an object is compared with the thing which we wish to illustrate. In the other, the object is put instead of the thing itself. It is a comparison, when I say that a man has done something like a lion; it is a metaphor, when I say of a man that he is a lion.

Metonymy is described as follows (Quintilian VIII.6.19–23):

Synecdoche is adapted to give variety to language by letting us understand the plural from the singular, the whole from a part, a genus from the species, something following from something preceding, and vice versa, but it is more freely allowed to poets than to orators. For prose, though it may admit *mucro*, 'a point' for a sword, and *tectum*, 'a roof' for a house, will not let us say *puppis*, 'a stern' for a ship, or *quadrupes*, 'a quadruped' for a horse. [...] From synecdoche, metonymy is not very different. It is the substitution of one word for another, and the Greek rhetoricians, as Cicero observes, call it 'hypallage'. It indicates an invention, by the inventor, or a thing possessed, by the possessor.

In view of the necessity to identify and classify regular patterns in the semantic behaviour of words, concepts such as these proved an excellent starting point for lexical semantics. At the same time, the quotations from Quintilian introduce a number of points that play a role in the development of lexical semantics. First, the demarcation between the various figures is not immediately obvious. Quintilian gives a definition of metaphor in terms of similarity, but synecdoche and metonymy are only defined by enumeration and example; also, the borderline between synecdoche and metonymy is explicitly recognized as being vague. The terminological differentiation between the mechanisms of semantic change will then obviously constitute a focus of attention for the historical-philological tradition.

Second, Quintilian's treatise is a textbook for (so to speak) professional writers and speakers, and accordingly discusses in which genres particular figures of speech may be appropriate. In contrast with the mainstream focus of the rhetorical tradition, however, historical-philological semantics looked at the rhetorical tropes not as decorative embellishments of stylistically refined texts, consciously applied by authors striving for a marked effect, but as well-entrenched features of the normal life of natural languages. Admittedly, a conception of the tropes as everyday phenomena could already be found in the

older rhetorical treatises, as in the quotations from Quintilian. Here, to refer to another famous instance of the rhetorical tradition, is how César Chesneau Du Marsais begins his treatise *Des tropes ou Des diferens sens dans lesquels on peut prendre un même mot dans une même langue* of 1730 (in the original spelling):

On dit comunément que les figures sont des maniéres de parler éloignées de celles qui sont naturéles et ordinaires: que ce sont de certains tours et de certaines façons de s' exprimer, qui s'éloignent en quelque chose de la maniére comune et simple de parler [...] bien loin que les figures soient des maniéres de parler éloignées de celles qui sont naturéles et ordinaires, il n'y a rien de si naturel, de si ordinaire, et de si comun que les figures dans le langage des homes. [...] En éfet, je suis persuadé qu'il se fait plus de figures un jour de marché à la halle, qu'il ne s'en fait en plusieurs jours d' assemblées académiques.

(It is often said that the figures of speech are ways of speaking that are far removed from those that are natural and common; that they are formulations and ways of expression that in some respect move away from the regular and simple manner of speaking [...] But rather than being ways of speaking far removed from those that are natural and normal, there is nothing as ordinary, as usual, and as common as the figures of speech in the language of man [...] In fact, I am convinced that more figures of speech are produced in one day at the market place, than in several days of an academic meeting.)

A treatise on 'the different meanings in which one may take one word in one language' (as it says in the title of Du Marsais's work) could just as well be called a treatise on semantics—but it is not until the nineteenth century that the perspective anticipated and announced by Du Marsais becomes dominant. When it does, what is the rhetorical terminology applied to?

### 1.1.3 Lexicography

Where does lexical semantics find its materials? The emerging discipline is faced with a task (to chart regular patterns of semantic behaviour) and comes equipped with an initial set of descriptive concepts (the rhetorical tropes), but what is its descriptive basis? Where do the examples come from? One source of examples is philological research into older texts, specifically, classical and biblical philology. Because the interpretation of the Greek, Latin, and Hebrew texts is often not immediately obvious, classical scholars naturally came across many intriguing instances of polysemy and semantic change. It is not a coincidence, from this perspective, that many of the earliest writers on semantic change were classical philologists. This holds for Karl Reisig, who may be credited with the oldest work in the historical-philological tradition (1839), but also for scholars like Haase, Heerdegen, Hey, and Hecht. When, in the course of the nineteenth century, interest in the older texts written in the

modern languages increased, more such cases came to the fore in the context of medieval and Renaissance scholarship.

Another source of raw materials came from lexicography. While the earliest printed dictionaries were bilingual or multilingual dictionaries for translation, there gradually emerged an interest in dictionaries focusing on a single language. In 1612, the Accademia della Crusca in Florence published its *Vocabolario degli Accademici della Crusca*, a detailed monolingual dictionary of modern Italian, lavishly illustrated with quotations from literary authors. It would serve as an inspiration and a model for similar dictionaries of other European languages. The Académie française, for instance, started a dictionary project in 1635 and published a first complete version of the *Dictionnaire de l'Académie française* in 1694, and Samuel Johnson's *Dictionary* appeared in 1755. Such reference works would provide the lexical semantician of the nineteenth century with a wealth of examples of polysemous lexical items— items with numerous meanings whose internal relationship can be described in terms of metaphor, metonymy, and the like.

But the relationship between lexicography and lexical semantics would grow even stronger. Dictionaries such as the ones just mentioned, even though they contained actual usage data in the form of literary quotations, usually carried some degree of legislative, prescriptive intention: they were aimed at safeguarding the purity of the language, or at least describing normatively accepted usage. In the course of the nineteenth century, a new, more purely descriptive dictionary enters the scene: the historical dictionary that intended to chart the development of the language from the earliest origins to the present day. Major examples include the *Deutsches Wörterbuch* (started by Jakob and Wilhelm Grimm, 1854–1954), the *Dictionnaire de la langue française* (by Emile Littré 1877), the *Oxford English Dictionary* (founded by James Murray, 1884–1928), and—the largest dictionary in the world by any count—the *Woordenboek der Nederlandsche Taal* (started by Matthias de Vries in 1864, and completed in 1998). Here is how Murray (1884: vi) describes the purpose of the dictionary in the Preface to the first volume; it intends

(1) to show with regard to each individual word, when, how, in what shape, and with what significations it became English; what development of form and meaning it has since received; which of its uses have in the course of time become obsolete, and which still survive; what new uses have since risen, by what processes, and when: (2) to illustrate these facts by a series of quotations ranging from the first known occurrence of words to the latest, down to the present day; the word being thus made to exhibit its own history and meaning: and (3) to treat the etymology of each word strictly on the basis of historical fact, and in accordance with the methods and results of modern philological science.

This statement brings together the lines we have indicated before: the interest in the semantic evolution of words, and the aspiration towards a scientific etymology. The grand historical dictionary projects that were started in the nineteenth century derive from the same concern as diachronic lexical semantics: a fascination with the correct description of the historical development of words and meanings. They testify that the nineteenth-century interest in the semantic histories of words led to a hitherto unsurpassed amount of descriptive work. As another indication of the intellectual link between theoretical semantics and lexicographical practice, we may note that two important theoreticians were at the same time the editors of a major dictionary: Paul compiled a *Deutsches Wörterbuch* (1897), and Darmesteter co-edited a *Dictionnaire général de la langue française* (Darmesteter and Hatzfeld 1890).

To summarize, when lexical semantics originates as a linguistic discipline, speculative etymology serves as a negative role model; lexicography and textual philology provide an empirical basis of descriptive lexicological data, and the tradition of rhetoric offers an initial set of terms and concepts for the classification of lexical semantic phenomena. But what exactly does the newborn discipline do with these starting points?

## 1.2 The nature of meaning

At the beginning of his *Griechische Bedeutungslehre,* Max Hecht sums up the disciplinary position of historical-philological semantics (1888: 5):

Insofern sie zugunsten der Lexikographie die Bedeutungen in zeitlicher Folge ordnet und im Interesse der Etymologie die Gesetze der Bedeutungsänderung aufstellt, hat sie sprachwissenschaftlichen Wert. Soweit sie aber diese Gesetze aus der Natur des Geistes herleitet und eine Geschichte der Vorstellungen gibt—Bedeutungen sind Vorstellungen—, fällt sie auf das Gebiet der empirischen Psychologie.

(Semantics is linguistically valuable to the extent that it chronologically classifies meanings in the interest of lexicography, and writes down the laws of semantic change in the interest of etymology. To the extent, however, that it derives these laws from the nature of the mind and that it writes a history of ideas—meanings are ideas—it falls within the realm of empirical psychology.)

This quotation (which will, incidentally, turn out to be quite important when we describe the transition from historical-philological to structuralist semantics) nicely ties in with the background sketched in the previous section: diachronic semantics is concerned with the classification of mechanisms of semantic change, an activity that links up with lexicography on the one hand and historical linguistics on the other. At the same time, Hecht's quotation introduces an additional aspect of historical-philological semantics: it is an

approach that assumes a psychological conception of meaning, one in which the linguistic phenomena under study are seen as revealing characteristics of the human mind. These two perspectives in fact demarcate the domain of historical-philological semantics. On the one hand, it produces a wealth (not to say a plethora) of systems for the classification of semantic change. On the other, it engages in a thorough reflection on the nature of semantic facts.

In this section and the following one, we will take a closer look at both aspects of historical-philological semantics. In both cases, we will illustrate the historical-philological approach by looking more closely at the opinions of a few major figures representing the mainstream of this tradition. At the same time, we will briefly describe the differences of opinion and the diverging perspectives that inevitably exist within this extremely productive framework.

With regard to the psychological orientation of historical-philological semantics (which forms the focus of the present section), three steps need to be taken. First, we will introduce the overall characteristics of the approach on the basis of the work of the French linguist Michel Bréal. Next, we look at the very important addition to the psychological approach formulated by the German linguist Hermann Paul: he spells out the importance of context and usage for the explanation of semantic change. (It is no coincidence, by the way, that we focus on Bréal and Paul: France and Germany were the dominant countries in this period of the development of lexical semantics, and Bréal and Paul were leading figures within those national traditions.) And finally, we will add a number of nuances by looking at differences of opinion or perspective that exist within the psychological orientation of historical-philological semantics.

### 1.2.1 Bréal on meaning and mind

How then, to begin with, can we characterize the overall methodological and theoretical profile of a psychologically oriented historical-philological approach? There are three prominent features, which we will illustrate with quotations from Bréal (1897), not because Bréal is the first or the single most important exponent of historical semantics, but because his highly influential work clearly expresses the major methodological ideas. The three characteristics listed here need not be simultaneously present in *all* of the works belonging to the historical-philological era; they do, however, adequately characterize the basic methodological outlook that is shared by a majority of the semantic studies in this period. (But we will come back to the dissident voices in a moment.)

First, it can hardly come as a surprise, after what we saw in the previous section, that semantics is defined as a *historical* discipline. Already on the first page of Bréal's *Essai de sémantique*, the diachronic orientation of semantics is indicated as an intuitively obvious matter of fact. Talking about linguistics, Bréal notes (1897: 1–3):

Si l'on se borne aux changements des voyelles et des consonnes, on réduit cette étude aux proportions d'une branche secondaire de l'acoustique et de la physiologie; si l'on se contente d'énumérer les pertes subies par le mécanisme grammatical, on donne l'illusion d'un édifice qui tombe en ruines; si l'on se retranche dans de vagues théories sur l'origine du langage, on ajoute, sans grand profit, un chapitre à l'histoire des systèmes. Il y a là, il me semble, autre chose à faire [...] La linguistique parle à l'homme de lui–même: elle lui montre comment il a construit, comment il a perfectionné, à travers des obstacles de toute nature et malgré d'inévitables lenteurs, malgré même des reculs momentanés, le plus nécessaire instrument de civilization.

(If one restricts oneself to the study of the changes of vowels and consonants, this discipline is reduced to a secondary branch of acoustics and physiology; if one merely enumerates the losses suffered by the grammatical mechanism, one creates the illusion of a building tumbling into ruins; if one hides behind vague theories about the origin of languages, one adds, without much profit, a chapter to the history of systems. There is, it seems to me, something else to be done [...] Linguistics talks to man about himself: it shows how he has constructed, how he has perfected, through difficulties of all sorts and in spite of an inevitable inertia, in spite even of temporary retreats, the most indispensable tool of civilization.)

It is even the case that an adequate understanding of words in their contemporary meaning requires a thorough knowledge of their semantic history: 'L'histoire peut seule nous donner aux mots le degré de précision dont nous avons besoin pour les bien comprendre' (Only history can give to the words the degree of precision that we require to understand them adequately) (1897: 124).

Second, Bréal highlights the *psychological orientation* of the study of meaning. There are actually two aspects to this: linguistic meaning in general is defined as a psychological phenomenon, and, more specifically, change of meaning is the result of psychological processes. With regard to the first feature, meanings are considered to be psychological entities, i.e. (kinds of) thoughts or ideas: '[Le langage] objective la pensée' (Language makes thought objective) (Bréal 1897: 273). The mental status of lexical meanings links up directly with the overall function of thinking, i.e. with the function of cognition as a reflection and reconstruction of experience. Language, one could say, has to do with categorization: it stores cognitive categories with which human beings make sense of the world: 'Le langage est une traduction de la réalité, une transposition où les objets figurent déjà généralisés et classifiés par

le travail de la pensée' (Language is a translation of reality, a transposition in which particular objects only appear through the intermediary of the generalizing and classificatory efforts of thought) (1897: 275). Language, then, is not autonomous; it is linked with the total set of cognitive capacities that enable men to understand the world with ever more refined conceptual tools, and it is embedded in their experience of the world.

If meaning as such consists of cognitive categories—a psychological type of entity—then meaning changes must be the result of psychological processes. That is to say, the general mechanisms of semantic change that can be derived from the classificatory study of the history of words constitute patterns of thought of the human mind. Bréal calls these mechanisms 'les lois intellectuelles du langage' (the conceptual laws of language), but he hastens to add that 'law' means something different here than in the natural sciences: a law of semantic change is not a strict rule without exceptions, but it represents a tendency of the human cognitive apparatus to function in a particular way. In a passage that opposes restricting linguistics to the study of the formal aspects of language, he remarks (1897: 338–9):

Nous ne doutons pas que la linguistique, revenant de ses paradoxes et de ses partis pris, deviendra plus juste pour le premier moteur des langues, c'est-à-dire pour nous-mêmes, pour l'intelligence humaine. Cette mystérieuse transformation qui fait sortir le français du latin, comme le persan du zend et l'anglais de l'anglo-saxon, et qui présente partout sur les faits essentiels un ensemble frappant de rencontres et d'identités, n'est pas le simple produit de la décadence des sons et de l'usure des flexions; sous ces phénomènes où tout nous parle de ruine, nous sentons l'action d'une pensée qui se dégage de la forme à laquelle elle est enchaînée, qui travaille à la modifier, et qui tire souvent avantage de ce qui semble d'abord perte et destruction. Mens agitat molem.

(We do not doubt that linguistics, giving up its paradoxical prejudices, will give a fairer treatment to the primary forces in languages, i.e. to ourselves and to human intelligence. The mysterious transformation that makes French grow out of Latin (just as Persian out of Zend, and English out of Anglo-Saxon), and that everywhere shows a remarkable set of similarities and parallelisms with regard to its essentials, is not simply the product of the decay of sounds and the wearing off of endings. Behind these phenomena in which everything seems to speak of decay, we feel the active efforts of human thought liberating itself from the form in which it is constrained, trying to modify it, and very often turning to its advantage what at first sight appears to be mere loss and destruction. Mind moves matter.)

The moving force of the human mind also shows up in the fact that the fundamental factor that brings the psychological mechanisms of semantic change into action consists of the communicative needs of the language user. Languages change because people try to express their thoughts as accurately and satisfactorily as possible (Bréal 1897: 8):

Le but, en matière de langage, c'est d'être compris. L'enfant, pendant des mois, exerce sa langue à proférer des voyelles, à articuler des consonnes: combien d'avortements, avant de parvenir à prononcer clairement une syllabe! Les innovations grammaticales sont de la même sorte, avec cette différence que tout un peuple y collabore. Que de constructions maladroites, incorrectes, obscures, avant de trouver celle qui sera non pas l'expression adéquate (il n'en est point), mais du moins suffisante de la pensée.

(The goal, as far as language is concerned, is to be understood. During months, the child exercises his tongue to produce vowels, to articulate consonants: how many failures, before he can clearly pronounce a syllable! On the grammatical level, innovations are of the same sort, with this difference that an entire people is involved. How many clumsy, incorrect, obscure constructions, before the one is found that will be, not the perfect expression of thought (there is none), but at least a sufficient expression of it.)

The psychological orientation of semantics has methodological consequences (this is the third major feature of the historical-philological approach). In the following quotation, Bréal does not simply repeat the point that semantics is a historical science, but he also has something to say about the way in which that scientific project is put into practice (1897: 278):

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.

(If one admits that there is a distinction between the historical and the natural sciences, that is, if one considers man as being the subject matter of a separate chapter of our study of the universe, language (which is the product of man), cannot stay on the other side, and linguistics will inevitably be a branch of the historical sciences.)

Although Bréal does not mention the word as such, semantics as he describes it here is a *hermeneutic discipline* in the sense of the German philosopher Wilhelm Dilthey. Clearly, the natural sciences *also* study historical processes (as in geology or the study of biological evolution), and that is why the difference between the natural and the human sciences that is mentioned in the quotation has to be sought on the methodological level rather than on the level of the subject matter of both approaches. The distinction made by Bréal probably refers to the theories of Dilthey, whose views on the relationship between the natural and the human sciences (*Naturwissenschaft* versus *Geisteswissenschaft*) were widely popular near the end of the nineteenth century (see e.g. Dilthey 1910). The methodological independence of the human sciences with regard to the natural sciences resides in the fact that they try to understand, by means of an empathetic process of interpretation (*Verstehen*, understanding or comprehension), the cultural forms of expression in which men have, throughout history, laid down their experience of the world.

The natural sciences, on the other hand, try to explain the characteristics of the material world by means of rigid laws. Next to having a historical and cultural orientation, the human sciences in the Diltheyan sense are hermeneutical *par excellence*: they try to reconstruct the original experience that lies at the basis of particular forms of human expression that have been transmitted from earlier times to the present day; they look for the expressive intention behind historical forms of expression.

The connection between the Diltheyan conception of the human sciences and the kind of linguistic semantics sketched above will be clear: through its historical approach, through its experiential orientation, and through the importance it attaches to the expressive intentions of language users as the source of linguistic change, historical-philological semantics fits nicely into the Diltheyan view of the human sciences. This is reflected on the methodological level. Because linguistic semantics is a historical discipline, its primary material consists of texts from dead languages or from previous stages in the development of a living language. Its basic methodological procedure is therefore the *interpretation* of those texts. Only afterwards can changes between periods (and the mechanisms guiding them) be recognized, classified, and explained. The primary methodological step of the historical semantician is that of the historical lexicographer and the philological scholar: to interpret historical texts against the background of their original context by trying to recover the original communicative intention of the author.

In sum, if we take Bréal as our starting point, historical-philological semantics is characterized by a focus on the dynamism of language, by a cognitive, psychological conception of meaning, and by an interpretative methodology. But how does a Bréal-like approach deal with the collective side of the language? This is where Hermann Paul's view of semantics provides an answer.

### 1.2.2 Paul on context and usage

If you focus on the individual creative acts that innovatively change the language, what exactly is the relationship with 'the language', given that language is indeed something more than a purely individual phenomenon? How does innovative individual behaviour relate to language as a shared institution? Hermann Paul's specification of a psychological conception of semantics, to which we now turn, provides an answer to precisely that problem. (His views are formulated in his influential introduction to historical linguistics, *Prinzipien der Sprachgeschichte*, first published in 1880. The quotes below are from the 5th edition of 1920.)

The first pillar of Paul's approach involves the distinction between the 'usual' and the 'occasional' meaning of an expression. The usual meaning

(*usuelle Bedeutung*) is the established meaning as shared by the members of a language community. The occasional meaning (*okkasionelle Bedeutung*) involves the modulations that the usual meaning can undergo in actual speech (1920: 75).

> Wir verstehen also unter usueller Bedeutung den gesamten Vorstellungsinhalt, der sich für den Angehörigen einer Sprachgenossenschaft mit einem Worte verbindet, unter okkasioneller Bedeutung denjenigen Vorstellungsinhalt, welchen der Redende, indem er das Wort ausspricht, damit verbindet, und von welchem er erwartet, dass ihn auch der Hörende damit verbinde.
>
> (By 'usual meaning', we understand the total representational content that is associated with a word for any member of a speech community. By 'occasional meaning', we understand the representational content that an interlocutor associates with a word when he uses it, and which he expects the hearer to associate with the word as well.)

If the *usuelle Bedeutung* is like the semantic description that would be recorded in a dictionary (fairly general, and in principle known to all the speakers of a language), then the *okkasionelle Bedeutung* is the concretization that such a general concept receives in the context of a specific utterance. The second pillar of Paul's conception of semantics is the insight that context is all-important to understand the shift from usual to occasional meaning. We can easily appreciate this point if we look at a number of different types of occasional meaning, and the way in which they derive from the usual meaning.

To begin with, let us note that there can be various usual meanings to a word: if a word is polysemous, the usual meaning involves a set of related meanings, a cluster of different well-established senses. The occasional meaning, on the other hand, is always a single reading. In many cases, then, realizing the occasional meaning amounts to selecting the appropriate reading from among the multiple established senses of a word. Paul highlights the importance of context in this process. German *Blatt* is likely to be interpreted differently in the context of a bookshop than when you are having a walk in the woods: 'sheet of paper' in the former case, 'leaf' in the latter.

In other cases, the contextualization of the usual meaning involves not a selection of one reading from among many existing ones, but the concrete specification of a more general sense. The word *corn*, for instance, used to be a cover term for all kinds of grain, but was differently specialized to 'wheat' in England, 'oats' in Scotland, and 'maize' in the United States, depending on the dominant variety of grain grown in each of these countries. Again, it is the context of use that triggers the specialized meaning.

Finally, there are instances in which the contextualized meaning does not contain all the features of the usual meaning. In a metaphoric expression like

*das Feuer der Leidenschaft* 'the fire of passion', the combination of 'fire' with 'passion' signals that *Feuer* cannot be taken in its original reading.

So we see how the interplay of contextual triggers and usual meanings can give rise to occasional meanings. But what about the reverse process? How can occasional meanings give rise to usual meanings? The third pillar of Paul's views consists of a dialectic relationship between language structure and use: occasional meanings that are used very often may themselves become usual, i.e. they may acquire an independent status. So, on the one hand, usual meanings are the basis for deriving occasional ones, but on the other, the contextualized meanings may become conventional and decontextualized. The clearest criterion for a shift from the occasional to the usual level is the possibility of interpreting the new meaning independently. If *corn* evokes 'wheat' without specific clues in the linguistic or the extralinguistic environment, then we can be sure that the sense 'wheat' has become conventionalized.

In this way, Paul develops a pragmatic, usage-based theory of semantic change: the foundation of semantic change is the modulation of usual meanings into occasional meanings. And the mechanisms of semantic change that semanticians are so eager to classify are essentially the same mechanisms that allow speakers to modulate those usual meanings: in the *corn* and *Feuer* examples, we can see how specialization of meaning and metaphor (two types of semantic change that would traditionally be mentioned in classifications of semantic change) operate at the concrete utterance level.

### 1.2.3 Variant voices

The psychological conception of meaning so clearly expressed by Bréal and Paul is the mainstream view of historical-philological semantics: by and large, it is the view of writers like Wegener (1885), Hecht (1888), Hey (1892), Stöcklein (1898), Thomas (1894, 1896), Waag (1908), Erdmann (1910) in Germany, Paris (1887), Roudet (1921) and Esnault (1925) in France, Wellander (1917, 1921) in Sweden, Nyrop (1901–34, 1913) in Denmark, Van Helten (1912–13) in The Netherlands, Whitney (1875) and Oertel (1902) in the United States. But it is not the only view, and it did not gain prominence immediately. Moreover, the overall psychological orientation leaves room for a number of variants. Let us therefore try to summarize the main differences of opinion. We will have a look at four different lines of research: first, the 'logical-classificatory' approaches that do not start from a psychological conception of meaning; second, alternative conceptions of the psychological aspects of meaning (which we introduced on the basis of Bréal); third, extensions of the contextual view (which we introduced on the basis of Paul); and fourth, the introduction of onomasiological research. In chronological terms, the voices mentioned in this section come both from before and after the formulation

of the standard view that we associate with Paul and Bréal. The differences of opinion and perspective discussed here far from exhaust the discussions that took place within the historical-philological tradition, but instead explore a number of major questions.

1  To begin with, the psychological orientation did not emerge immediately. In the first half of the nineteenth century, up to the 1860s, the focus lay on the mere identification of regular patterns of semantic development and the classification of those pathways of change, rather than on the cognitive background of such phenomena. This approach, which is often called 'logical-classificatory' or 'logical-rhetorical' in contrast to 'psychological-explanatory', may be found in the work of Reisig (1839), Haase (1874–80), and Heerdegen (1875–81).

The essential distinction between the two approaches is the role of causality in semantics. One of the main reasons why scholars like Bréal and Paul opt for a psychological perspective is that it may provide an explanation for semantic change; as we saw in the quote from Bréal, words may change their meaning because language users are trying to express something new: individual speakers of the language change the language to adapt it to their needs. By contrast, the logical-classificatory approach either devotes less attention to explanatory questions, restricting its endeavours to the identification and classification of changes, or naively attributes the changes to 'the life of the language' rather than to the activity of the language user.

2  Expressions like 'the life of the language' would indeed seem to suggest that languages are entities in themselves, with an independent existence of their own. This is not an uncommon metaphor in nineteenth-century linguistics; a comparative philology that draws up 'family trees' describing how one 'mother language' may historically develop into several 'daughter languages' draws on the same image. In semantics, Arsène Darmesteter's *La vie des mots* (1887, first published in English 1886) is a prominent example of such an organicist metaphor. The book opens with the statement that 'les langues sont des organismes vivants dont la vie, pour être d'ordre purement intellectuel, n'en est pas moins réelle et peut se comparer à celle des organismes du règne végétal ou du règne animal' (Languages are living organisms the life of which, even though it is purely intellectual, is in no way less real, and may be compared to that of the organisms in the vegetable or animal kingdom) (1887: 3). The organicist metaphor is then expanded throughout the book: there is a chapter on 'How words are born', one on 'How words live together', and a final one on 'How words die'.

Such an organicist metaphor obviously does not explain very much: as Bréal emphasized, you need a mind to get language moving. But whose mind? When

we consider that question, we come across a difference of perspective within the group of psychologically inclined researchers. Bréal and Paul focus on the individual: you need the mind of the language user to get language moving. But Wilhelm Wundt's *Völkerpsychologie* (or 'peoples' psychology') (1900) takes a rather more collective approach: given that language is a collective entity rather than a purely individual one, the mind that is expressed in the language is primarily the mind of a people—a *Volksgeist*, in other words, the typical 'spirit of a nation or people' that defines their specific identity. The basics of the Völkerpsychologie were defined by Moritz Lazarus (1856–7) and Hermann Steinthal (1860), who co-founded the *Zeitschrift für Völkerpsychologie und Sprachwissenschaft*. They argued that individuals are heavily influenced in the way they think, feel, and act by the group to which they belong—and predominantly by the *Volk*, people or nation, of which they are a member. The specific 'soul' or 'spirit' of such a nation or people may be studied in the products in which it expresses itself, as in language.

This idea in itself had a considerable pedigree in German thinking: it had been typical of Romanticism, notably in the philosophy of Johann Gottfried von Herder, and it played a prominent role in the views of Wilhelm von Humboldt (1836). Von Humboldt, in fact, was important for the development of semantics because he introduced a conceptual distinction between an outer and an inner linguistic form (*äussere Sprachform, innere Sprachform*). The outer linguistic form is the material, phonetic side of language; the inner form is the specific semantic structure, lexical or grammatical, that lies behind the outer form and that differentiates one language from another. And it is precisely because languages carry with them different inner patterns of meaning that they can embody the specific view of a language community. Lazarus and Steinthal, then, built on Humboldt by taking his ideas to psychology, where they were further explored by Wundt.

Wundt (who is known as the father of experimental psychology, because he was the founder of the first psychology laboratory and exerted a major influence on the development of modern psychology) developed the *Völkerpsychologie* by focusing on three types of symbolic expression: language, myths, and customs. Not surprisingly, then, one of the ten volumes of his monumental *Völkerpsychologie* (1900) is devoted entirely to language and semantic change. However, except for some influence that he exerted on the classification of semantic changes, Wundt's Völkerpsychologie programme was not a big success in linguistics. In fact, the basic problem regarding the explanation of semantic change remained as unsolved as in an organicist conception of language. Postulating a collective mind does not explain how such a shared set of beliefs and values can emerge or change—unless you accept the unlikely assumption that it has an existence and a life of its own.

(As we will see later, the impact of Humboldt does not stop with Wundt: a number of views in the structuralist era, like Weisgerber's, were influenced by Humboldt's idea of an 'inner form of language'.)

A rather different form of variation within the psychological approach involves the type of mental phenomena that lexical semantics focuses on. When one thinks of meaning as a mental, cognitive phenomenon, attention is automatically drawn towards descriptive concepts: the meaning of an expression like *Christmas tree* would be something like 'an evergreen tree (or an artificial imitation of it) that is put up in or near the house during the days surrounding Christmas and that is decorated with lights, baubles, festoons and the like'. However, the cognitive content of a word goes well beyond this immediate descriptive concept, and a number of researchers in the tradition of historical-philological semantics draw attention to the importance of such a wider notion of conceptual value. Karl Otto Erdmann (1910), in particular, introduces a set of terms that captures two important aspects of such a broader view of lexical meaning: *Nebensinn* and *Gefühlswert*. *Nebensinn* refers to the conceptual associations of an expression: what *Christmas tree* calls up mentally is not just the notion of a decorated tree, as defined above, but also the thought of a typical atmosphere, presents, family reunions, a special dinner, etc. All these associations belong to the knowledge we have of Christmas trees, and even if the features in question would not apply to all possible Christmas trees, they certainly relate to the typical Christmas tree, allowing for cultural differences. A psychologically oriented form of semantics necessarily has to include a description of this broader network of associations, if it is to do justice to the mental status of an expression like *Christmas tree*. *Gefühlswert* refers to the emotional value of words, in the sense in which words like *boozed up*, *plastered*, *sodden* have a more negative overtone than *drunk*—in the same way in which *drunk* itself is less neutral than *inebriated* or *intoxicated*.

In contemporary terminology, *Nebensinn* and *Gefühlswert* together could be referred to by the concept of 'connotation', i.e. the associated concepts, values, and feelings of a word, in contrast with 'denotation', as the primary referential meaning. Both notions are important for the further unfolding of our story. As far as the inclusion of *Nebensinn* in the scope of semantics is concerned, although it might seem pretty obvious when formulated in this way, it evokes one of the major tensions in the history of lexical semantics: how restrictive can or should a semantic description be? In particular, should it include the full range of cognitive associations of a word? This is a question we will have to come back to a number of times in the course of our story, and as we will see, it involves some of the basic underlying differences of opinion within lexical semantics. *Gefühlswert*, on the other hand, played a more direct

role in the further development of historical-philological semantics. To begin with, as in Jaberg (1901, 1903, 1905), Schreuder (1929), Van Dongen (1933), the different ways in which the emotive value of a word may change need to be incorporated into a classification of semantic changes, and the specifics of the developments need to be described. The major types of emotive meaning change that are usually distinguished are pejorative change, i.e. a shift towards a (more) negative emotive meaning, and ameliorative change, i.e. shift towards a (more) positive emotive meaning. We will come back to this classificatory issue in section 1.3.1.

Going beyond such a classification of shifts of emotive meaning, scholars such as Sperber (1914, 1923) or Van Ginneken (1911–12, 1912–13) argue that emotive expressivity is a major cause of semantic change. A famous example is Sperber's analysis of metaphors used by frontline soldiers in World War I: a machine gun, for instance, was called *machine à coudre* (sewing machine) or *moulin à café* (coffee grinder). Sperber notes that the objective similarities which may explain the metaphoric image, like the sound that the machines make, explain only part of the metaphoric image. More important is the affective impact of the metaphor: the positive associations of the domestic objects that serve as a source for the metaphoric image remove some of the threat posed by the weapon that is the target of the image. The motivation for using the metaphor is not a conscious conceptual expressive need (talking about something that has no name yet), but instead a largely unconscious emotional need: the desire to neutralize the negative value of a lethal weapon by familiarizing it. Sperber's insistence on the role of such emotive factors in linguistic change aims to be a correction to Bréal's rather voluntaristic image of expressive needs: expressive needs do not only consist of the rational wish to communicate ideas, but can also be triggered by subconscious psychological stimuli.

3  Let us now turn to the third group of variant voices that we need to consider. In the previous group, we met with alternative conceptions of the psychological aspects of the standard model: a more collective interpretation, as in the Völkerpsychologie movement, or a more emotive interpretation, as in the work of Erdmann, Jaberg, or Sperber. In the present group of approaches, we accordingly look at alternative conceptions of the second pillar of the standard model, which we illustrated with the work of Paul. The dialectic relationship between language structure and use implies a contextualist view of meaning: meanings are modulated in the context of actual language use; that is how an *okkasionelle Bedeutung* comes into existence next to the *usuelle Bedeutung*. But the notion of context is obviously fairly broad: how exactly should it be filled in? There are two specific approaches that we will now

focus on: a sociosemantic one, which gives a sociological interpretation of the contextualist aspects of historical-philological semantics, and a communicative one, which gives a pragmatic interpretation.

The sociosemantic approach originates in the work of Antoine Meillet (1906); it is further represented by Vendryès (1921) and to some extent by Nyrop (1913). The essential idea is that the social group in which a word is used may differentiate between polysemous readings of a word, or may lead to meaning change. Paul himself, as we saw, had already drawn attention to linguistic and extralinguistic context factors: the words with which a target word is combined (we used *das Feuer der Leidenschaft* as an example) or the situation in which it is used (which we illustrated with *Blatt* and its different readings). Meillet, then, adds social group as an important (to Meillet, perhaps all-important) context factor.

For one thing, social context differentiates between different senses. Referring to an example of Bréal's, Meillet notes that the polysemy of *opération* is resolved in different social contexts: for a mathematician it refers to calculations, for a doctor it refers to medical surgery, for a worker it invokes the functioning of a piece of machinery, and so on. Further, such contexts may not only disambiguate, they may also be the cause of semantic differentiation, when a new meaning arises within a specific social group. That is how Meillet explains the meaning 'to arrive' of French *arriver*, which etymologically means 'to reach the shore'. *Arriver* is derived from the reconstructed Latin form *adripare*, in which *ripa* is 'shore'. Within the social group of sailors, disembarking has the consequence of reaching one's destination, and when the word is taken over by the larger community of language users, only the latter reading is retained. Although the proponents of the sociosemantic approach may sometimes suggest the opposite, social factors such as these do not really compete with the traditional mechanisms of change (like metaphor and metonymy), but rather work together with them. In the example, the shift from 'to reach the shore' to 'to reach one's destination' is easily recognized as a metonymy, while at the same time the social background of the change is obvious.

For the pragmatic (rather than sociological) specification of the contextualist position, the essential idea is that context needs to be seen from a communicative point of view: meanings are dynamic not only as a function of the (situational or social) context, but also—and perhaps primarily—as a function of the communicative interaction between language users. This position is characterized in a nutshell by Wegener's statement 'dass die Worte zunächst nicht als Lautgefässe mit bestimmtem Inhalte erlernt werden, sondern als Mittel zu bestimmten Zwecken' ('that words are not primarily learnt as phonetic vessels with a clearly delineated content, but as instruments with a specific goal', 1885: 72). Words are tools for human interaction—for persuading,

promising, pleasuring, passing on information—and their semantics has to be described accordingly. The consequences of this recognition are clearly articulated by Erdmann. He notices, to begin with, that not only polysemy but also vagueness is rampant in the lexicon. What for instance, is the meaning of *der Deutsche*, 'the German' (1910: 3)? When is someone a German? Various features may play a role: citizenship of the German Reich (remember that we are still before World War I), mother tongue, or descent. When the three features coincide, there is no problem, but when only one or two of the features can be applied, discussion may arise. The general model of word meaning that Erdmann derives from this recognition deserves a longer quotation, because it anticipates a number of developments further on in the history of lexical semantics (1910: 5).

Worte sind vielmehr im allgemeinen Zeichen für ziemlich unbestimmte Komplexe von Vorstellungen, die in mehr oder minder loser Weise zusammenhängen [...] Die Grenzen der Wortbedeutung sind verwaschen, verschwommen, zerfliessend. Treffender aber noch wird meines Erachtens der Sachverhalt gekennzeichnet, wenn man überhaupt nicht von Grenzlinien des Umfangs redet, sondern [...] von einem Grenzgebiet, das einen Kern einschliesst. [...] Den Kern denken wir uns dann alle diejenigen Dinge oder anderen Vorstellungen enthaltend, denen unter allen Umständen die Benennung durch das fragliche Wort zukommt, während wir dem Grenzgebiet alle diejenigen Vorstellungen weisen, denen man die Benennung sowhol zu- wie absprechen kann.

(Words in general are rather signs for fairly unspecific complexes of mental representations that belong together more or less loosely [...] The boundaries of word meanings are vague, unclear, indeterminate. The situation is, I think, even more adequately described if one simply does not talk about the borderline of the range of a word, but [...] if one talks about a border area that includes a central one. [...] In the central area we situate those things and other representations that would under all circumstances deserve to be named by the word in question, while in the border area we situate all those representations for which the name may or may not hold.)

Now, it would be easy to evaluate this vagueness as a defect of the language, as something that needs to be overcome; but if one takes a communicative perspective, it can be readily appreciated that the vagueness is often communicatively real. Take the German politician Bismarck's dictum *Wir Deutsche fürchten Gott und sonst nichts in der Welt*, 'we Germans fear God and nothing else in the world'. If we were to ask Bismarck, Erdmann argues (1910: 46), whether his statement also applies to the German-speaking Swiss or to speakers of Polish living within the boundaries of the German state, the answer would probably be that he simply did not have all those distinctions in mind, and that they are of no significance for his utterance. Communicatively

speaking, in other words, the underspecified border area of the lexical concept is not disturbing.

4  The fourth line of research emphasizes the importance of an onomasiological perspective in lexicology. Although it has hardly found its way into the canonical English terminology of linguistics, the distinction between *onomasiology* and *semasiology* is a crucial one in the European tradition of lexicological research. Although it falls outside the period we are investigating in this chapter, the following quote from 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, that is, at a multiplicity of expressions which form a whole' (1980: 278). The distinction between semasiology and onomasiology, in other words, 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. Between the two, there is a difference of perspective: semasiology starts from the expression and looks at its meanings, onomasiology starts from the meaning and looks at the different expressions.

The term 'onomasiology' was introduced by Adolf Zauner (1903) in his study on body-part terms in the Romance languages, but that does not mean that onomasiological topics were absent from the earlier tradition. Let us first note that, from a diachronic perspective, one obvious way of filling in an onomasiological perspective would be an enquiry into lexicogenetic mechanisms. *Lexicogenesis* involves the mechanisms for introducing new pairs of word forms and word meanings—all the traditional mechanisms, in other words, like word formation, word creation (the creation of entirely new roots), borrowing, blending, truncation, ellipsis, or folk etymology, that introduce new items into the onomasiological inventory of a language. From this point of view, onomasiological change involves change in the lexicon at large, and not just changes of word meaning—but crucially, the semasiological extension of the range of meanings of an existing word is itself one of the major mechanisms of onomasiological change—one of the mechanisms, that is, through which a concept to be expressed gets linked to a lexical expression. In this sense, the study of onomasiological changes is more comprehensive than the study of semasiological changes, since it encompasses the latter (while the reverse is obviously not the case).

Now, although basically concerned with semasiological changes, the major semasiological treatises from Reisig (1839) to Stern (1931) do not restrict themselves to purely semasiological mechanisms like metaphor and metonymy,

but also devote attention to mechanisms of onomasiological change like borrowing or folk etymology. In fact, we will suggest in section 1.3.3 that an insufficiently clear demarcation between onomasiological and semasiological mechanisms may well be a major point of criticism with regard to the type of semantic classification regularly produced in this period. At the same time, a specifically onomasiological tradition emerged in the margin of the overwhelmingly semasiological orientation of historical-philological semantics, viz. the *Wörter und Sachen* ('words and objects') movement inaugurated by Rudolf Meringer (1909) and Hugo Schuchardt (1912).

The principal idea is that the study of words, whether etymological, historical, or purely variational, needs to incorporate the study of the objects denoted by those words. As Meringer (1912) noted, in an article defining the scope and purpose of the journal *Wörter und Sachen* that he launched in 1909, 'Bedeutungswandel ist Sachwandel [...], und Sachwandel ist Kulturwandel' (Semantic change is object change [...], and object change is cultural change). The basic perspective is not so much 'What do words mean?' but 'How are things named and classified through language?' Although the study of abstract concepts is not excluded, the emphasis in the *Wörter und Sachen* approach tended to fall almost exclusively on concrete objects, either natural kinds like plants, animals, or body parts, or artefacts like tools and all other elements of the material culture of a given language community or a historical period. Inorder to study the language of an agricultural community, for instance, a good knowledge is required of its natural environment, farming techniques, customs, social organization, etc. The whole approach has in fact a strong cultural orientation, which is translated methodologically in interdisciplinary links with archaeological and historical research. The *Wörter und Sachen* movement, and the onomasiological perspective in general, also had an important influence on the development of dialect geography, and specifically on the dialect atlases that were produced, or at least started, in the first decades of the twentieth century. In the *Atlas linguistique de la France* by Jules Gilliéron (1902–20), the *Sprach- und Sachatlas Italiens und der Südschweiz* by Karl Jaberg and Jakob Jud (1928–40), and the *Deutscher Sprachatlas* by Ferdinand Wrede (1927–56), onomasiological maps show the words used for a given concept in the geographical areas covered by the map.

Although systematic onomasiological research occupies only a minor position in the context of historical-philological semantics at large, it is of particular importance for the further development of lexical semantics. As we will see in the next chapter, an onomasiological perspective dominated the second major stage in the history of the discipline—albeit in quite a different form than the *Wörter und Sachen* movement.

To summarize the present section, we have introduced four groups of theoretical positions that deviate to some extent from (or at least add nuances to) the standpoint that we associated with the work of Bréal and Paul. A first group, which largely constitutes an older position than Bréal's and Paul's on the chronological line of development, is concerned with the logical-rhetorical classification of meaning changes without relating to psychology. A second group involves variations on the psychological position of Bréal and Paul. Here, we mentioned the Völkerpsychologie movement, and more importantly, those scholars that emphasized the role of non-conceptual, emotive forms of meaning in the development of vocabularies. A third group of voices comprises alternative ways of filling in the contextualist aspects of the standard position: either in a sociological vein, as in the French sociosemantic movement initiated by Meillet, or in a communicative, pragmatic vein. Finally, we pointed to the growing awareness of the distinction between a semasiological and an onomasiological perspective, as represented by the *Wörter und Sachen* movement.

The differences of opinion and focus covered by these various approaches far from exhaust the theoretical variation within the historical-philological tradition, but they do capture important tendencies that may help us to see some order in the abundance of historical-philological studies. More differences involve the classification of semantic changes, to which we now turn.

## 1.3 Classifications of semantic change

Classifications of semantic change are the main empirical output of historical-philological semantics, and an in-depth study of the historical-philological era (which is not what we are aiming for here) would primarily take the form of a classification of such classifications. Rather than give intricate overviews of how many different classifications of semantic change the historical-philological tradition produced and how they are related to one another, conceptually and genealogically, we will present the classificatory efforts in three steps, each time adding a level of complexity. In section 1.3.1, we present a panorama of some of the most common elements that may be found in such classifications: what are the phenomena that historical-philological semantics predominantly tends to examine? Section 1.3.2 adds one degree of nuance, demonstrating that historical-philological semantics does not stop at the level where we find phenomena like metaphor and metonymy, but also searches for lower-level patterns of semantic development. Section 1.3.3 focuses on the more elaborate schemas that appeared in the final stage of the development of historical-philological semantics. To get an idea of these culminating achievements, we will conclude the section with the classification suggested by Albert

Carnoy (1927) and, contrasting with Carnoy's, the classification proposed by Gustaf Stern (1931). These sophisticated and detailed catalogues mark the end of a period, and they do so in a particularly symbolic way: Carnoy's *La science du mot* is exactly contemporaneous with Leo Weisgerber's vigorous attack on the tradition of historical semantics (Weisgerber 1927), an attack that marks the beginning of the structuralist era in lexical semantics. And the year of publication of Stern's *Meaning and the Change of Meaning* is the same year in which Jost Trier published his monograph *Der deutsche Wortschatz im Sinnbezirk des Verstandes*—the first major descriptive work in the new structuralist paradigm.

### 1.3.1 Main types of change

To get a good grip on the variety of phenomena that may appear in classifications of semantic change, we will distinguish between four groups of factors. The basic distinction is that between semasiological and onomasiological mechanisms. Semasiological mechanisms involve the creation of new readings within the range of application of an existing lexical item. Onomasiological (or 'lexicogenetic') mechanisms, conversely, involve changes through which a concept, regardless of whether or not it has previously been lexicalized, comes to be expressed by a new or alternative lexical item. Semasiological innovations provide existing words with new meanings. Onomasiological innovations couple concepts to words in a way that is not yet part of the lexical inventory of the language. Within the set of semasiological mechanisms, a further distinction involves that between changes of denotational, referential meaning and changes of connotational meaning (specifically, of emotive meaning or *Gefühlswert*). The changes of denotational meaning are divided into analogical changes and non-analogical changes, according to whether the new meaning does or does not copy the semantics of another, related expression. In this way, we can distinguish between four major groups.

1    The non-analogical changes of denotational meaning comprise the classical quartet of specialization, generalization, metonymy, and metaphor. We may call these 'classical' because they constitute the core of most classifications, and because they link up most closely with what may be found in the rhetorical tradition.

Semantic *specialization and generalization* are types of lexical-semantic change by means of which a lexical item develops a new meaning that stands in a relationship of, respectively, subordination or superordination to the older meaning. If the semantic range of application of an item is conceived of in set-theoretic terms, specialization implies that the range of application of the new meaning is a subset of the range of the old meaning. In the case of

generalization, the new range includes the old one. Terminologically, 'restriction' and 'narrowing' of meaning equal 'specialization'; 'expansion', 'extension', 'schematization', and 'broadening' of meaning equal 'generalization'.

Examples of specialization are *corn* (as we saw earlier, originally a cover-term for all kinds of grain, now specialized to 'wheat' in England, to 'oats' in Scotland, and to 'maize' in the United States) and *queen* (originally 'wife, woman', now restricted to 'king's wife, or female sovereign'). Examples of generalization are *moon* (primarily the earth's satellite, but extended to any planet's satellite), and French *arriver* (which etymologically means 'to reach the river's shore, to come to the bank', but which now signifies 'to reach a destination' in general, as we have already noted). A comparison of the *moon* example and the *corn* example shows that the original meaning either may remain present or may disappear after the development of the new meaning.

*Metonymy* (including synecdoche—but see the remark at the beginning of section 1.3.2) is a semantic link between two readings of a lexical item that is based on a relationship of contiguity between the referents of the expression in each of those readings. When, for instance, one drinks *a whole bottle*, it is not the bottle but merely its contents that are consumed: *bottle* can be used to refer to a certain type of receptacle, and to the (spatially contiguous) contents of that receptacle. The concept of contiguity mentioned in the definition of metonymy should not be understood in a narrow sense as referring to spatial proximity only, but broadly as a general term for various associations in the spatial, temporal, or causal domain. *Metaphor*, on the other hand, is commonly analysed as being based on similarity rather than contiguity.

The definitional opposition between similarity and contiguity is not without problems: what exactly is meant by contiguity? We have already seen in our quotations from Quintilian that classical rhetoric seems to have had more difficulty in providing an analytical definition for metonymy/synecdoche than for metaphor, and the same holds true for the historical-philological tradition. In fact, the popularity of the cover term 'contiguity' is essentially due to the work of Ullmann (1957, 1962), which falls outside the historical-philological period. Much later in this book, we will look into the current debates about the distinction between the two mechanisms and their underlying basis: see section 5.2.3. In the meantime, we may accept the distinction between similarity-based and contiguity-based extensions of meaning as a first approximation. One additional remark should be made at this point, though.

The definitional problems, in fact, are not restricted to the concept of contiguity. Although this is not often discussed in the literature, note that the demarcation of metaphor in terms of similarity is deceptively simple. The difficulty becomes apparent when we consider the shift in meaning of, for instance, a word like Dutch *blik*, which initially names the material tin,

and is then used to name cans for vegetables and the like. But cans can be called *blik* even if they are not made of tin or any other metal. These shifts can be easily explained in terms of similarity: using the old word *blik* 'a tin can' for the new object 'a can (in another material than tin)' is motivated by the fact that there is a functional similarity between both objects. But is this a metaphor? Assuming that there is a tendency to answer the question negatively, the definition of metaphor will have to be refined by stating, for instance, that metaphor involves *figurative* similarity. At the same time, the set of basic mechanisms will have to be expanded with the concept of changes based on *literal* similarity, to account for the shift in *blik*. This solution will, however, remain largely terminological as long as we do not have a theory of figurativeness—a theory, in other words, that allows us to determine when a particular word meaning is (possibly, to a certain degree) figurative or not.

2 Non-denotational meaning changes may involve any type of non-referential meaning, but in actual practice, as we have already mentioned, the non-denotational semantic developments that have been discussed most extensively in the literature involve emotive meanings. The major types of emotive meaning change that are usually distinguished are *pejorative* change, i.e. a shift towards a (more) negative emotive meaning, and *ameliorative* change, i.e. a shift towards a (more) positive emotive meaning. An example of pejoration is *silly*, which formerly meant 'deserving sympathy, helpless or simple', but which has come to mean 'showing a lack of good judgement or common sense'. An example of amelioration is the history of the word *knight*, which originally meant 'boy, servant', and thus indicated a considerably more lowly social position than it does now.

Two further remarks need to be made. First, pejorative and ameliorative changes may or may not be accompanied by denotational changes. The shift that leads *boor* from 'peasant, farmer' to 'unmannered man' is simultaneously a shift of denotational and of emotional value. The transition seems impossible, however, without a primary shift that changes the emotive overtones of *boor* without changing the denotation. Rather in the way in which the negative expression *whore* contrasts with the neutral expression *prostitute* (while basically expressing the same denotational content), *boor* was a derogatory denomination for peasants before the negative part of its semantic value was detached and generalized into 'unmannered person'. Notice also, in this respect, that the pejorative or ameliorative change may or may not involve the retention of the original meaning. *Boor* has lost its original meaning, but its Dutch cognate *boer* has both the original reading 'farmer' and the pejorative reading 'unmannered person'.

Second, we need to clarify the relationship between pejorative and ameliorative shifts on the one hand and euphemism and dysphemism on the other. Euphemism is the use of a positively (or less negatively) connoted word instead of a negatively connoted one with more or less the same denotational meaning. Thus, *to pass away* or *to part with this life* are euphemistic expressions for *to die*, just like *public woman* and *prostitute* for *whore*. Dysphemism is the use of a more negatively connoted, harsher, more offensive word, like calling a cemetery a *boneyard*. Now, note that euphemism presupposes a particular emotive value in the euphemistic expression, but does not as such change that value. Using *prostitute* as a euphemism for *whore* presupposes that the former word has fewer negative overtones than the latter, but it does not change those overtones: if it did, there would be no euphemistic effect. That is to say, whereas pejorative change is a diachronic semasiological process, devices such as euphemism and dysphemism primarily involve synchronic stylistic choices. However, the repeated use of a euphemism can be the cause of a semasiological change. The euphemistic effect may, in fact, wear off; the negative evaluation of the referent of the expression then gradually undermines the original euphemistic value of the expression. That is why some euphemisms are regularly replaced by others: *cripple* gave way to *handicapped* gave way to *disabled* gave way to *physically challenged*.

A similar pattern occurs with other stylistic devices. The two most commonly mentioned, apart from euphemism and dysphemism, are hyperbole and litotes. Hyperbole involves the exaggerated expression of a negative or positive appreciation of something, such as when someone is called *an absolute genius* when he has merely had a single bright idea, or when, conversely, someone's behaviour is called *moronic* when it is merely unwise or foolish. Litotes is the converse of hyperbole: expressing something in an attenuated way, like saying *I wouldn't mind* when you mean *I'd very much like to*. Now, whereas the use of hyperbole initially presupposes the stronger negative force of a word such as *moronic* as against *unwise* or *foolish*, the repeated use of the hyperbolic expression may erode its emotive force. Thus, *dreadful* in expressions like *to be dreadfully sorry* has gone through an ameliorative shift from 'to be dreaded' to the neutral meaning 'enormous', the link between both being the hyperbolic use of the original meaning.

3  The group of analogical changes involves those semantic shifts in which one word, so to speak, copies the polysemy of another word. If the two expressions belong to different languages, semantic borrowing obtains, that is, the process by means of which a word x in language A that translates the primary meaning of word y in language B copies a secondary meaning of y. (This process is also known as 'semantic calque'.) For instance, the Greek word *angelos* originally

just meant 'messenger', but developed the meaning 'angel' by copying the polysemy of the Hebrew word *ml'k*, which means 'human messenger, envoy' as well as 'heavenly messenger, angel'.

Within a single language, analogical changes on the basis of semantic associations can be observed when a semasiological extension in one element of a lexical field is imitated by other items in the same field. In contemporary Dutch, for instance, the use of *zwart* 'black' in expressions such as *zwarte markt* 'black market, illegitimate trade' and *zwart geld* 'black money, i.e. money earned on an illegitimate basis, specifically not having been reported to the tax service', seems to have paued the way for dralogous shifts in the meaning of other colour terms. *Geld witwassen* literally means 'to make money white by washing' but figuratively refers to the fiscal laundering of illegitimately earned money. Similarly, *grijs* 'grey' is used to characterize activities which, although not entirely illegal, evade existing rules and regulations: *grijs rijden* is not to pay full fare when using public transport, in contrast with *zwart rijden*, which implies not paying at all.

The analogical basis of a semantic change need not mean that the regular semasiological mechanisms do not apply. The development of *ml'k* from 'messenger' to 'heavenly messenger' in Hebrew is a specialization, but then so is the emergence of the secondary reading of *angelos*. The polysemy in Hebrew may have triggered the polysemy in Greek, but the relationship between the two meanings in Greek falls within the range of the core cases of semantic extension.

4  Although classifications of lexical-semantic changes are primarily concerned with semasiological phenomena, we will see in section 1.3.3 that they do not always succeed in clearly drawing the line with an onomasiological perspective. It should not be forgotten, in this respect, that the semasiological extension of the range of meanings of an existing word is itself one of the major mechanisms of onomasiological change—one of the mechanisms, that is, through which a concept to be expressed gets linked to a lexical expression. In this sense, the study of onomasiological changes is more comprehensive than the study of semasiological changes, since it encompasses the latter, while the reverse is obviously not the case. So let us have a very brief look at the most important lexicogenetic mechanisms. First, new words may be formed by word formation, that is, the regular application of morphological rules for derivation and composition. Second, new words may be formed by the transformation of the sound shape of existing words, for instance through clipping (*pro* from *professional*) or blending (*brunch* as the merger of *breakfast* and *lunch*). Third, new expressions may be borrowed from other languages. Fourth, new words may be created out of the blue, for instance on the basis

of onomatopoeia, or in brand names like *Kodak*. And fifth, of course, new expressions may be semantic extensions of existing ones—but then we are back where we started.

### 1.3.2 Lower-level patterns

Now that we have an indication of the major elements that would go to make up classifications of semantic change, we may briefly have a look at the factors that lead to differences of classification. The major reason is that the various classifications pay a different amount of attention to the groups that we have distinguished. For instance, while the first group will be included in most classifications, the others may be represented only partially, or not at all.

A second reason for variation among the classifications resides in differences of opinion about the exact definition of specific elements. A word like *synecdoche* for instance, may receive different interpretations and may thus wind up in different places in the classificatory schemas. In the traditional rhetorical classification *synecdoche* refers to part–whole relations. It is then often seen as a specific type of metonymy; this is for instance the opinion of Dumarsais. So, one point of divergence between various classifications is whether or not they include cases of synecdoche under the umbrella of metonymy. But part–whole relations may be found in different places: when we fill up the car, the part–whole relation is a referential one; it exists between the elements in reality that a word refers to. But some authors, like Darmesteter, see part–whole relations on a metalinguistic level as well. It can then be said, for instance, that the two meanings of *cat* exhibit a part–whole relationship: the small, furry, domesticated *Felis catus* is part of the larger category *Felis*, which includes tigers, leopards, lions and others next to the domesticated cat (or conversely, we can say that the meaning 'Felis' is part of the meaning 'Felis catus'). If this extension of part–whole relations is accepted (which is far from obvious, actually), examples of specialization and generalization would have to be classified as cases of synecdoche–and this is, in fact, what Darmesteter does.

A third reason for variation involves the classificatory depth of the schemas. When it comes to listing subtypes of the main categories, some classifications restrict themselves to giving examples of the basic types only, whereas the more elaborate treatises present subclassifications—which may then vary from one another. As an example, we will now have a look at an inventory of metonymical patterns that are included in Paul (1920), Nyrop (1913), Waag (1908), and Esnault (1925). Let us first note that the subclassification of types of metonymy is most often based on an identification of the target and source concepts involved. Thus, the *bottle* example mentioned in section 1.3.1 exhibits the name of a receptacle (source) being used for its contents (target), a

pattern that can be abbreviated as 'receptacle for contents'. Making use of this abbreviated notation, other common types of metonymy are the following: 'a spatial location for what is located there' (*the whole theatre was in tears*); 'a period of time for what happens in that period, for the people that live then, or for what it produces' (*the nineteenth century was history-minded*); 'a material for the product made from it' (*cork*); 'the origin for what originates from it' (*astrakhan*); 'an activity or event for its consequences' (when the *blow* you have received hurts, it is not the activity of your adversary that is painful, but the physical effects that it has on your body); 'an attribute for the entity that possesses the attribute' (*majesty* does not refer only to 'royal dignity or status', but also to the sovereign himself); 'part for whole' (*hired hand*). The relations can often work in the other direction as well. *To fill up the car*, for instance, illustrates a type 'whole for part'.

If we now turn to a comparison of the metonymies that we find in the work of Paul (1920), Nyrop (1913), Waag (1908), and Esnault (1925), we may identify the metonymical patterns by formulas of the type SPATIAL PART & SPATIAL WHOLE. This indicates that the pattern generalizes over the two directions in which the metonymic association may work: part for whole, and whole for part. (The names given to the patterns do not necessarily correspond to the way in which they are identified by the original authors. The examples may be contemporary ones, or examples taken from older sources.)

SPATIAL PART & SPATIAL WHOLE (Paul; Waag; Nyrop; Esnault)
*Tony Blair* was *the Prime Minister of England* (where *England* stands for the UK as a whole)

TEMPORAL PART & TEMPORAL WHOLE (Waag)
German *morgen* 'morning' for 'tomorrow' (the morning is only a part of the day)

LOCATION & LOCATED (Paul; Waag; Nyrop; Esnault)
*the thunder woke up the whole house* (i.e. the people in the house)

EFFECT & CAUSE (Paul; Waag; Nyrop; Esnault)
Greek *phobos* 'flight' for 'fear'

SUBEVENT & COMPLEX EVENT (Paul; Waag)
*Mother is cooking potatoes* (where cooking the potatoes stands for preparing an entire meal)

CHARACTERISTIC & CHARACTERIZED ENTITY (Paul; Waag; Nyrop; Esnault)
French *une beauté* 'a beauty'
*we need more brains* (i.e. smart people)

PRODUCER & PRODUCT (Paul; Waag; Nyrop; Esnault)
*I'm reading Shakespeare* (his works)

CONTROLLER & CONTROLLED (Waag; Nyrop)
*Schwarzkopf defeated Iraq* (i.e. the army that Schwarzkopf commanded)

CONTAINER & CONTAINED (Waag) (Nyrop; Esnault)
French *aimer la bouteille* 'love the bottle, i.e. alcohol'

TEMPORAL CONTAINER & CONTAINED (Esnault)
*the nineteenth century was history-minded*

MATERIAL & OBJECT (Nyrop; Esnault)
French *carton* 'cardboard' for 'cardboard box'

LOCATION & PRODUCT (Nyrop; Esnault)
*china* (the country, the tableware originally produced there)

POSSESSOR & POSSESSED (Esnault)
*the long straw goes first* for 'the person with the long straw'

ACTION & PARTICIPANT (Paul; Waag; Nyrop)
*to author a book*

ACTION & INSTRUMENT (Esnault)
*the pen is mightier than the sword* for 'writing is more powerful than fighting'

PIECE OF CLOTHING & PERSON (Paul; Waag; Nyrop; Esnault)
French *une vieille perruque* 'an old wig' for 'an old person'

MEMBER ENTITY & COLLECTION (Waag)
*Fritz* 'a German, a German soldier' for 'the German army'

The list, to which we will return in section 5.2.3, shows that various authors identify different patterns of metonymy, and that some patterns (like SPATIAL PART & SPATIAL WHOLE or CAUSE & EFFECT) are apparently more popular or salient than others. But the very fact that such configurations are listed is significant in itself. It shows that the historical-philological search for semantic regularity is not restricted to general mechanisms like metaphor and metonymy, but takes the form of a quest for the more specific moulds of polysemy. This holds not only for metonymy: in metaphor research we notice an interest in lower-level regularities, too. Without attempting a comparative analysis of the kind we illustrated for metonymy, let us have a look at some of the metaphoric patterns mentioned by Waag (1908). (All examples are German. They present a fraction only of the materials collected by Waag.)

METAPHORS BASED ON SIMILARITIES OF SHAPE AND APPEARANCE

Concrete objects may be compared among one another, with the more common or more familiar object providing the source for naming the other. Body part terms, for instance, may be transferred to (parts of) plants, animals, artefacts, landscape features. *Auge* 'eye' provides a name for the round spots on the tail of peacocks and the wings of butterflies, for globules of fat floating on soup, and for the eyes of potatoes. *Ohr* 'ear' refers to the handle (the ear) of a cup. *Zunge* 'tongue' appears in *Landzunge* 'tongue, neck, finger of land; peninsula'. *Nagel* 'fingernail' is also the common name for the small metal spikes that we drive in with a hammer.

METAPHORS BASED ON SIMILARITIES OF STRUCTURAL POSITION

In a number of cases, it is not the shape of the object as such that is the basis for the metaphor, but the position of the object within the larger structure of which it is a part. Again restricting the examples to body parts, *Kopf* 'head' is used for the top of a mountain, even though the top does not have a round shape like heads do. In the same way, *Fuss* 'foot' is used as in *foot of the mountain*, merely because it is the nether part. *Bauch* 'belly' refers to the central part of a bottle, not just because it is the most rounded part, but also because it takes up the central position, below the *Hals* 'neck' (where we find the same combined motivation for the metaphor, which seems to invoke both the elongated shape and the upper position of the neck).

METAPHORS BASED ON FUNCTIONAL SIMILARITIES

The motivation for the metaphoric transfer need not involve concrete appearances but may be abstract, when the function of the source is compared to the function of the target. Thus, *Haupt* 'head' is used in a functional sense, to refer to the head of state, the head of the family, the master of a college etc. Similarly, *die rechte Hand* 'the right hand' is the main helper or instrument. Combined motivations of the type we saw before occur here too: the *Fuss* 'foot' of a table is functionally the area of support, but it is also the structurally lowest part, and the *Flügel* 'wing' of an airplane resembles a bird's both in function, position, and shape.

METAPHORS RELATING SPACE AND TIME

Polysemies between the spatial and the temporal domain abound: *lange, kurze Zeit* 'long, short time', *Zeitpunkt* 'point in time, exact moment', *Zeitraum* 'area in time, i.e. time period'. Temporal entities may be conceived as moving in time: *die Zeit vergeht* 'time passes', *die Stunde kommt* 'the hour comes, approaches', *ein Witz folgte dem anderen* 'one joke followed the other'. Spatial prepositions have temporal meanings: *in dieser Woche* 'in this week', *zur Zeit* 'at the time', *über acht Tage* 'over eight days, i.e. after eight days'.

METAPHORS RELATING SPACE AND QUANTITY

Words expressing spatial size and position are used to indicate abstract quantities and intensities: *grosser Hitze* 'big heat', *hohe Alter* 'high age', *die Temperatur fällt* 'the temperature drops', *die Begeisterung steigt* 'enthusiasm rises'. In quite a number of cases, the abstract quantity involves an evaluation; spatial size may express the degree

to which something is positively or negatively appreciated, and spatial position may express an evaluative rank: *sein Ansehen sinkt* 'his prestige drops', *ein grosser Charakter* 'a great (grand, noble) character', *von hoher Geburt* 'of high birth', *er stellt Ossian unter Homer* 'he places Ossian below Homer'.

METAPHORS RELATING SENSORY DOMAINS

Synaesthetic metaphors connect one sensory domain to the other, as in *knallrot* 'loud, glaring red': the sound expressed by *Knall* 'bang, clap' is transferred to the visual domain. Conversely, *ein schöner Ton* 'a beautiful tone' contains a transfer from the visual to the auditory. *Süsser Klang* 'sweet sound' connects the gustatory and the auditory; *scharfer Klang* 'sharp sound' connects touch and hearing.

METAPHORS RELATING CORPOREAL AND COGNITIVE PHENOMENA

Bodily actions and experiences provide a basis for talking about psychological phenomena. *Fassen* 'to take hold of' also means 'to understand'; in the same way, *begreifen* 'to understand' is derived from *greifen* 'to grab'. *Fühlen* 'to feel' primarily refers to the sensory domain of touching, but is extended towards the emotions. Other sensory domains provide further examples, like the transfer from the visual to the cognitive domain in *sehen* 'to see' and hence 'to understand'; from the visual to the emotional in *trübe* 'turbid, cloudy' and hence 'sad'; from the gustatory to the emotional in *ein bitteres, süsses Wort* 'a bitter, sweet word'.

As in the case of the subtypes of metonymy, current research evidences a resurgence of the interest in metaphoric patterns such as these: see section 5.2.1. We will see there how such regularities are currently labelled on the basis of a general TARGET IS SOURCE pattern. For instance, some of the evaluative metaphors would be summarized as MORE IS UP, and some of the cognitive metaphors would fall under the label THINKING IS SEEING.

### 1.3.3 Classificatory complexities

Albert Carnoy's and Gustaf Stern's classification of semantic changes represent the final stage of the heyday of historical-philological semantics. In systems like Stern's and Carnoy's, the main types of semantic change that we distinguished in section 1.3.1 are maximally represented, and the classificatory depth is considerable: basic categories are divided into subclasses, which may then be divided into further subclasses, and so on, almost ad infinitum. One consequence of this is that works like Carnoy (1927) and Stern (1931), but also Nyrop (1913) or Waag (1908), remain copious treasures of examples for anyone interested in processes of semantic change: regardless of the classificatory framework they employ, the wealth of examples amassed in these works continues to amaze.

But typically also, these later classifications may include fundamental distinctions that are absent from the more straightforward ones like Paul's or

Darmesteter's. In Carnoy's case, the main distinction in his classificatory schema, between *métasémie évolutive* and *métasémie substitutive*, derives from Wundt's distinction between 'regular' and 'singular' meaning changes. The former happen gradually and collectively, in the speech community as a whole. The latter take place individually and suddenly, as a consequence of a conscious effort of an individual language user. Carnoy talks about the intentional character of the second type, as opposed to the unintentional nature of the first type. This intentional, conscious act of the individual language user is an attempt to find a word that is more expressive, that better captures his ideas or feelings, than the ordinary word. It is precisely in this sense that the second type is referred to as 'substitutive' change. In Stern's case, the major addition involves a distinction between changes due to linguistic causes, and changes due to external causes. So what do these classifications look like when we consider them in more detail, and how similar are they?

In the following pages, we will summarily present the essentials of both Carnoy's and Stern's classification, focusing on the similarities. The correspondences between both classifications are summarized in Figure 1.1. It may be useful to use this figure as a background during the following exposé (which will take a highly condensed form). In the figure, the left-hand side presents

| Carnoy | | | Stern |
|---|---|---|---|
| ecsémie, prossémie, périsémie, aposémie, amphisémie, métendosémie | métasémie évolutive: métasémie simple | unintentional non-analogical linguistic change | Class V: Transfer Class VI: Permutation Class VII: Adequation |
| antisémie, homosémie, sysémie | métasémie évolutive: métasémie complexe | unintentional analogical linguistic change | Class II: Analogy Class III: Shortening |
| diasémie évocative (incl. métecsémie), diasémie appréciative, diasémie quantitative | métasémie substitutive: diasémie | intentional linguistic change | Class IV: Nomination |
| | | change due to external causes | Class I: Substitution |

FIGURE 1.1.  A comparison of Carnoy's and Stern's classification of semantic change

the essentials of Carnoy's classification, while the right-hand side is devoted to Stern. The middle, darker-shaded columns identify the major categories of both classifications. They are situated side by side to bring out the correspondences; thus, *métasémie simple* on Carnoy's side matches *unintentional, non-analogical linguistic change* in Stern's schema. (In Stern's case, the overarching structure of major categories is reconstructed by bringing together the classificatory outlines on pages 166–9, 175, and 345 of his book.) The categories in the middle columns are expanded in the lighter-shaded areas to the left and right; thus, on the second row, *métasémie complexe* has *antisémie, homosémie, sysémie* as subdivisions, and on the third row, *intentional linguistic change* is specified as *Class IV: Nomination*. Now let us see what lies behind the categories.

1 The first subgroup within Carnoy's class of evolutionary changes, *métasémie simple*, corresponds with the first group of factors that we distinguished in 1.3.1, with two exceptions: the absence of metaphor (which is treated, under the label *métecsémie*, as a substitutive change), and the presence of *métendosémie*, which seems to be a new category. *Ecsémie* corresponds with meaning generalization, semantic specialization is called *prossémie*. *Périsémie*, *aposémie*, and *amphisémie* correspond with different types of metonymy. *Amphisémie* refers to metonymies that involve actions and qualities. Examples are French *circulation* (which indicates not only the act or process of circulating, but also the totality of people and vehicles participating in the traffic), and English *authority* (which is not just 'the quality of having expertise or power in a particular field', but also 'a person having that expertise or power'). *Périsémie* and *aposémie* both involve nominal concepts, like substances and entities. In cases of *périsémie*, the link between source and target is merely one of association (as when French *bourse* 'purse' is used for the money in it). In cases of *aposémie*, the link is one of dependence and origin, as in cause–effect or material–product metonymies.

*Métendosémie*, then, seems to fall outside the traditional classification. It comprises cases like French *plume*, which initially refers to a bird's feathers, but later on (like the English word *pen*, in fact) becomes the name for a particular type of writing instrument used for writing with ink. The difference with regular metonymies of the type discussed before seems to reside in the fact that the latter automatically involve a shift of reference, whereas the cases of *métendosémie* primarily exhibit a change of perspective, only later to be followed by a referential change. The feather used for writing can be thought of as a feather, and it can be thought of as a writing instrument, but the money in the purse can only be thought of as money, and not as a purse. It is not very clear, though, whether that is sufficient to distinguish this pattern from

metonymy; after all, the conceptual link between the feather-as-object and the feather-as-instrument is a metonymic one.

Complex evolutionary change, *métasémie complexe*, involves the analogical changes that we mentioned as a third factor group in section 1.3.1. Three basic classes are distinguished, according to whether the influence is one of dissimilation, assimilation, or contagion. Semantic dissimilation, or *antisémie*, occurs when the meanings of words establish themselves in opposition to the meanings of other words. This happens, for instance, when synonyms are differentiated: the French words *frêle* and *fragile* both derive, through distinct historical routes, from Latin *fragilis* 'breakable', but this literal meaning is now only carried by *fragile*, while *frêle* has the derived meaning 'slender, of delicate build'. Semantic assimilation is captured by the term *homosémie*: words that are already partly similar come to resemble each other even more, as with interlinguistic calques (semantic loans). Semantic contagion or *sysémie* takes place along the syntagmatic axis: words that regularly occur in each other's vicinity influence each other's meaning. The English word *premises*, for instance, receives its meaning 'buildings and land on a particular site' through a reanalysis of the Latin expression *praemissas mansiones* 'the aforementioned constructions, the buildings in question' as used in official deeds of sale.

The distinction between the three kinds of substitutive changes, or *diasémie*, is based on the kind of effect that the substitution intends to obtain. While evocative substitutive changes tend to evoke a new and surprising view of things, appreciative substitutive changes are based on the favourable or unfavourable connotations attached to certain expressions, and quantitative substitutive changes tend to heighten or attenuate the intensity with which an idea is expressed. *Diasémie quantitative*, in fact, includes the traditional classes of hyperbole (*hypersémie*) and litotes (*hyposémie*). *Diasémie appréciative* comprises the traditional cases of euphemism and dysphemism, under the name of *eusémie* and *dyssémie* respectively.

*Diasémie évocative* is by far the largest class of substitutive changes. It includes three subclasses, of which *métecsémie* (or metaphor) is the most important one. In *épisémie*, the new expression is drawn from typical or salient characteristics of the concept to be named. When, for instance, *le vert* 'the green one' refers to the alcoholic drink absinthe, a picturesque (in Carnoy's words) feature of the designandum is chosen as the motif expressed in the name. In *parasémie*, the source domain is the same as the domain of the target concept: a concept of the same kind is substituted for the normal word. Thus, a humorous substitution of *fabriquer* 'manufacture' for *faire* 'to do, to make (in general)' involves related concepts. Not surprisingly, the mechanisms of the intentional, substitutive changes resemble those of the unintentional,

evolutionary changes. An example like *le vert*, for instance, would probably be considered a case of metonymy from a more traditional point of view, while the *fabriquer* case would seem to be an example of generalization. If this is a general correspondence, then metaphor is the only traditional type of change restricted to substitutive changes: all metaphors, in other words, are supposed to be deliberately and consciously chosen expressions that are specifically lively and evocative.

2  In Stern's classification, to which we now turn, the distinction between change due to external causes and purely linguistic changes is based on the idea that in certain cases of meaning shift, the evolution is triggered by a change in the objects referred to. The English word *artillery* originally indicated weapons in general, and in particular arms for the throwing of missiles and projectiles, like bows, slings, and catapults. Because the arms used for warfare changed, the contemporary meaning is 'all the guns in an army'. A change in reality (the substitution of a certain object by another) leads to a change in the language. Similar are those cases in which our knowledge of the referents, or our attitude to them, changes. With the progress of science, for instance, the concept people associate with a word like *electricity* or *atom* changed.

Within the group of internal linguistic causes, Class II, 'Analogy', includes, among other things, the mutual semantic influence of formally related words. The English adjective *fast*, says Stern, has the almost contradictory meanings 'quick' on the one hand (a fast car) and 'fixed, immovable' on the other (when the colours of a shirt are not fast, you should be careful if you are going to wash it). If we focus on the adjective alone, it is difficult to explain the semantic shift, but the adverb *fast* does show a stepwise historical development from 'firmly' through 'vigorously, violently, eagerly' to 'swiftly'. As the semantic history of the adjective completely lacks the intermediate reading 'vigorous, violent, eager', we may conclude from the evidence that the meaning 'quick' of the adjective is modelled by analogy with the meaning 'in a quick way' of the adverb. The adjective, so to speak, borrows the meaning 'swift' from the cognate adverb. Class III, 'Shortening', involves cases of ellipsis, as in the shortening of *narcissism* to *narcism*, or that of *private soldier* (an ordinary soldier, originally in contrast with the aristocratic officers) to *private* 'common soldier'.

Under 'Nomination' and 'Transfer', Stern subsumes not only the classical mechanisms of meaning extension such as metaphor and metonymy, but also hyperbole and litotes, euphemism and dysphemism. Like Carnoy, Stern makes a distinction between intentional and unintentional changes. Class IV,

'Nomination', refers to intentional processes, class V, 'Transfer', to the unintentional ones.

'Permutation' and 'adequation', finally, describe shifts in the way in which language users interpret the relation between linguistic expressions and their references. The English *bead*, which originally meant 'prayer', afterwards obtained the meaning 'pearl, little ball'. The ground for this transfer probably lies in the fact that at prayer a rosary was used, of which the little balls marked the counting of the prayers. In expressions like *to count one's beads* it might not have been clear to the language user whether *bead* referred to the prayer itself or to the balls in the rosary. 'Adequation' describes a similar shift in understanding a particular expression, but seems to be more concerned with secondary shifts, i.e. with shifts that follow a primary shift in meaning. Carnoy's illustration of *métendosémie* may serve as an example: once *pen* starts referring to metal writing instruments, the feather for writing will primarily be thought of as an instrument rather than a plume.

3   This survey does not do justice to all the details in either Carnoy's or Stern's classification. Both make further distinctions within each of the categories that they identify. What we have described here, however, is sufficient for a short discussion. The only major difference between the principles of Stern's classification and those of Carnoy's is the imposition of a distinction between changes due to linguistic causes and changes due to external causes. Apart from that, the similarities between the two schemas turn out to be greater than the disparities. Both authors present rich, richly-illustrated classifications that bring together elements from the main types of semantic change that we distinguished in 1.3.1: core mechanisms like metaphor and metonymy, changes of connotative meaning, and analogical changes. At the same time, in spite of the breadth and the depth of both works, they also seem to suffer from a similar problem, viz. the balance between a semasiological and an onomasiological perspective on lexical change. A first indication of the difficulty of keeping the two perspectives separated is the incorporation of elliptical changes, as in Stern's *private soldier* example. Is this best thought of as a change of meaning of an existing word, or should we rather say that a new word is introduced? As a noun, the word *private* did not exist before the shortening process, so we could just as well say that a new word is created. But then, why not also introduce other lexicogenetic mechanisms, of the type that we mentioned in 1.3.1? Further, it would seem that the two major innovations that we find in Carnoy's and Stern's classification (the distinction between intentional and unintentional changes, and the notion of externally caused changes) are also motivated by an implicit onomasiological way of thinking.

First, take Stern's Class I. In what sense is an innovation in reality the cause of semantic mutations? From a semasiological point of view, the link between bows, slings, and catapults on the one hand and firearms on the other is simply one of functional similarity: no reason for positing a separate category. At the same time, the modification is never automatic: whether or not the old term *artillery* will be extended to the new firearms is not the result of the changes in the reality of warfare as such; it always depends on a decision of the language users to categorize the new things as similar to the old ones, instead of (for instance) just inventing a new term. That is where the onomasiological perspective comes in: the change in reality is important not because it automatically causes a semasiological change, but because it creates an onomasiological need, the need for either creating a new category or adapting an extant one.

Similarly, whether semantic shifts occur intentionally or non-intentionally (a distinction that is incorporated in both Carnoy's and Stern's systems) is basically an onomasiological process. If the intentional changes are those in which the language user deliberately achieves a special effect by the conscious substitution of one conspicuous or surprising or particularly expressive word for another, more common one, then intentionality primarily involves a process of onomasiological choice rather than a semasiological transformation. In addition, it may be briefly noted that there are independent reasons for being critical of the distinction between intentional and unintentional changes, in the sense that the distinction is an implicit dichotomization of what is essentially a cline. There is a continuum between the intentional and deliberate and the unintentional and spontaneous. But as the classification cannot capture the gradience, the historical linguist will encounter severe empirical difficulties determining not only at what point of the cline a particular change is to be situated, but also at what point the line between the two dichotomous classes would have to be drawn. To the extent that these difficulties may endanger the practical usefulness of the classification, the distinction between intentional and unintentional changes has to be treated with some reservation.

To conclude, if we see Stern and Carnoy as the culmination, or at least the endpoint, of the historical-philological tradition, we notice both strengths and weaknesses. A wealth of materials, both conceptually and descriptively, goes hand in hand with a tendency to over-classify, and an idiosyncratic (in Carnoy's case even arcane) terminology that seems deliberately to avoid the more established terms. At a fundamental level, there is a problem with the intrusion of an onomasiological perspective into a semasiological classification.

## 1.4 Beyond historical-philological semantics

Even though most of the work in historical-philological semantics has become inaccessible to a contemporary international audience, the intrinsic value of this tradition can hardly be underestimated. The empirical scope of the framework is remarkable, even by present-day standards: a multitude of examples from a wide variety of languages serves to illustrate and define a broad variety of theoretical concepts. Later approaches in lexical semantics (specifically when they tend to discuss theoretical issues on the basis of a restricted set of data) often do not achieve the same descriptive breadth; and in this regard, it can only be regretted that so many interesting observations and fascinating phenomena from the realm of diachronic semantics remain largely unknown to present-day scholars. From a theoretical rather than a descriptive point of view, a similar reflection obtains. As we will see later, current developments in lexical semantics to a considerable extent constitute a return to the concerns of historical-philological semantics. Many of the older discussions on the subtleties of metaphor and metonymy or the psychological background of meaning in natural languages, then, could still be relevant for current discussions: we will return to the issue a number of times in the course of our text.

Next to the contribution of historical-philological semantics to the study of particular lexicological phenomena, the approach has a lasting theoretical importance because it draws attention to two concepts that will play a fundamental role in the assessment of any theory of lexical semantics. First, historical-philological semantics highlights the dynamic nature of meaning: meanings are not immutable, but change spontaneously and routinely as language is applied in new circumstances and contexts. As a consequence of the semantic changes it undergoes, a word acquires multiple meanings, and polysemy, as the situation resulting from such semantic shifts, is so to speak the natural condition of words. Theories of lexical semantics will therefore have to come to terms with polysemy, just as historical-philological semantics comes to terms with it by focusing on the diachronic mechanisms that lead from one meaning to the other.

Second, the historical-philological approach raises the question of how language relates to the life of the mind at large. Language definitely has a psychological side to it: we experience meanings as something 'in our head', in the same way in which other forms of knowledge are mental phenomena. But is it correct to do as historical-philological semantics does—to equate meanings with mental concepts in the broadest possible sense? Is it right to include all knowledge that can possibly be associated with a word into the meaning of that word, as when Erdmann incorporates the *Nebensinn*

into word meaning? Or should lexical semantics be more parsimonious, and rule out ephemeral connotations and encyclopedic cognition from the very concept of lexical meaning? Again, this is a fundamental issue with which any theory of lexical semantics will have to come to terms, and which was put on the agenda by historical-philological semantics: how exactly is meaning a psychological phenomenon?

Now, if we move beyond the obvious merits of historical-philological semantics and adopt a more critical attitude, it is useful to distinguish between criticism that questions the fundamentals of the approach, and remarks that take the framework for granted but examine the way in which it lives up to its own programme. The former position leads to the next stage in the development of semantics: structuralist semantics rejects the diachronic focus of historical-philological semantics together with its psychological conception of meaning. We will see in the next chapter how exactly structuralist semantics motivates its dismissal of the fundamentals of historical-philological semantics. In the present section, however, we will consider to what extent historical-philological semantics accomplishes its own objectives: given the lines it draws and the tasks it sets itself, where are the weak points? Two areas have to be mentioned: the methodology of semantic research and the classification of semantic changes.

With regard to the latter, we have seen that such classifications constitute the epitome of historical-philological semantics, but that does not mean that the actual proposals are beyond criticism. Specifically, the demarcation between semasiological and onomasiological perspectives is not a trivial matter, as we saw in our discussion of Carnoy and Stern.

From a methodological point of view, it is striking that the treatises produced in the framework of historical-philological semantics do not have systematic recourse to actual texts. There are notable exceptions, like the work of Haase (1874–80) or Nyrop (1913), who draw on actual textual material to illustrate their analyses, but very often, the examples of semantic change are presented and discussed in isolation, without textual context, and with an emphasis on shifts of conventional meaning, i.e. on semantic changes that have attained wide currency in the language in question. This relative neglect of actual texts is remarkable for an approach that emphasizes the pragmatic nature of semantic changes, as in the views of Paul that were sketched above. For an approach that pursues a usage-based conception of semantic change, one would expect more attention for concrete texts and textual dynamics of meaning. The empirical basis of historical-philological treatises, however broad it may be, seems to consist primarily of lexical uses as may be found in dictionaries: well-entrenched, easily recognizable semantic changes, rather than the more transient and particular changes that occur in individual texts.

Methodologically speaking, it would seem that historical-philological seman-tics could profit from a bottom-up approach in which textual materials are used directly, much as a historical lexicographer would proceed. Indirectly, through their reliance on materials drawn from historical dictionaries, the diachronic semanticians do have a methodological basis in actual texts, but studying them directly is less frequent than one might expect.

Even more importantly, it is remarkable that an approach that focuses on the mechanisms of polysemy very much restricts its research to single instances of semantic change, in which one reading leads to the other. Focus-ing on such individual pairs of source meanings and derived readings oblit-erates the view on the overall structure of word meaning. How do these different derived senses belong together in the global semasiological structure of a word? Historical-philological semantics is concerned with the structure of polysemy, but what exactly does that structure look like, if you do not restrict the analysis to the separate steps that lead from one meaning to the other, but instead take into account the whole picture of all the shifts that occur within the semantic structure of a lexical item? Is that structure just the sum of the individual shifts, or are there any structural principles that hold together the meanings of a word over and above the individual binary links between existing and derived readings? Lexical studies concentrating on the full semantic range of a single word are rare in historical-philological semantics, however. In Chapter 5, we will learn how contemporary approaches to meaning change deal with this issue. But first, we have to pay attention to developments in lexical semantics for which diachronic semantics is much less central than it was for historical-philological semantics.

## Further sources for Chapter 1

We do not have at our disposal a general, encompassing study of the history of lexical semantics. Studies in the historiography of semantics mostly do not have the chronological and theoretical coverage of the present work; they tend to concentrate on individual authors, periods, or movements. The period treated in Gordon (1982) overlaps the most with the history treated here, but Gordon only studies a number of individual authors, up to the 1960s. A fragmentary coverage also characterizes Cruse (1986), which is still the only international textbook devoted specifically to lexical semantics, but which focuses nearly exclusively on the relational variety of structuralist semantics (as presented in section 2.4 of the present book). In general introductions to semantics or lexicology like Allan (2001), Löbner (2002), Lipka (2002), Cruse (2004), and Hurford, Heasley and Smith (2007), however, contempo-rary developments are making their appearance, specifically from the field of cognitive semantics. Saeed (2009) in particular devotes considerable attention to newer trends in word meaning research. The broadest coverage of lexical semantics is to be found in Blank (2001), a succinct but excellent introduction to lexical semantics, written in German, and in Cruse, Hundsnurscher, Job, and Lutzeier (2002), a voluminous reference work on all aspects of lexicol-ogy. General resources for the study of lexical semantics further include the bibliography of semantics compiled by Gordon (1980, 1987, 1992) and the annotated bibliography of Gipper and Schwarz (1962–89). Specifically for the study of metaphor, we have a bibliography compiled by Van Noppen (1985) and Van Noppen and Hols (1990). In addition, there is a glossary of basic terms in semantics and pragmatics published by Cruse (2006), and a selection of 100 representative papers on lexicology edited by Hanks (2007), which also contains a number of less easily available publications.

The most accessible and comprehensive reference work about the period treated in the present chapter is Nerlich (1992). It individually discusses the various scholars of the historical-philological era, for Germany, France, and the Anglo-Saxon world, with a rich bibliography that points the way to many more primary and secondary publications than can be mentioned here. The older overviews of historical-philological semantics remain valuable sources, however. Kronasser (1952) and Quadri (1952) provide minute, thematically organized summaries of existing research in semasiology and onomasiology respectively, while Baldinger (1957) is a succinct outline of the tradition. In contrast with Kronasser and Quadri, Ullmann (1957) develops his own struc-turalist theory of semantic change, but his coverage of the older literature is excellent. More specialized historiographic work includes Knobloch (1988), Schmitter (1990), and Desmet (1996).