1. Introduction

*Spreading activation* is a term used in psychology, psycholinguistics and cognitive linguistics. It refers to a model describing processes thought to be taking place during language production and comprehension. The model predicts that during the conscious mental processing of one particular word, other words that are related to it in various ways will be affected by a spread of activation, which means that their retrieval will be more rapid than that of entirely unrelated words. For example, the conscious processing of the word lexicology will result in an activation of semantically, morphologically and syntagmatically related words like *lexis, vocabulary, word, lexeme, structure, morphology* or *word-formation*. Metaphorically speaking, words do not surface from the mental lexicon alone, but bring along their peers.

In this paper I want to argue that the development of English lexicology in Germany between the year 1970 and the beginning of the 21st century can be described as a process of *spreading contextualisation*. The idea is that the linguistic perspective on words changed during this period in such a way as to include more and more aspects beyond the words themselves. Starting out from the structuralist notion that words are part of a system rather than autonomous linguistic units, which was dominant up to at least the 1970s, lexicologists have found reasons to widen their scope of interest to a variety of other contexts that have a crucial bearing on the understanding of the nature of words and the structure of the English lexicon: pragmatic, cognitive, social contexts, and others. It goes without saying that this process of spreading contextualisation has not taken place in English lexicology in isolation in Germany, i.e. without any influence from other linguistic communities, most notably of course the British and the American, and from other linguistic disciplines and other philologies. But it can
be said that German and other German-speaking English lexicologists have taken the lead in some avenues of contextualisation, have anticipated ideas that were discovered, or in fact re-discovered, by the mainstream much later and have been keen on taking up ideas from outside with a readiness not to be found, for example, in other European countries like France and in the study of other languages.

2. The State of the Art around 1970

What was the starting-point for English lexicology in Germany around the year 1970? As far as external influences are concerned, the situation is rather straightforward. The dominant linguistic paradigm in the USA, Generative Transformational Grammar, did not have a genuine interest in words at all. But since a number of problems with the syntax of sentences did not seem to be solvable without at least some concern for words and their meanings (cf. the notorious "colourless green ideas sleep furiously"), Chomsky had somewhat willy-nilly allowed for the inclusion of word-related semantic information in the form of semantic features (referred to as "syntactic"), selection restrictions and projection rules. With his important paper on nominalisation, Chomsky had even ventured into the terrain of word-formation, though of course with predominantly syntactic objectives.

In Britain, it was John Lyons who had implemented structuralist thinking in the form of his sense-relations as early as 1963: Prior to that Stephen Ullmann had given an unprecedented degree of prominence to semantics with his two books The Principles of Semantics, where he also made use of the term lexicology, and Semantics: An Introduction to the Science of Meaning.

In hindsight, one of the most important and pioneering contributions to the study of words from the German-speaking area was Ernst Leiss's Der Wortinhalt, to which I will return towards the end of this paper. And last but not least, Hans Marchand's monumental study The Categories and Types of Present-day English Word-formation: A Syn-

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chronic-diachronic Approach" had already begun to assume a firm place as the standard source on English word-formation all over the world.

This means that the present story begins at a time when lexicological problems had already managed to attract a fair amount of attention, both world-wide and in English lexicology in Germany. Semantics, morphology and word-formation were firmly established and more or less well respected linguistic disciplines. Central concepts like morpheme, lexeme, semantic feature, sense-relation, denotation, connotation, polysemy and homonymy were part of the technical apparatus and jargon, although the significance of some of them was to remain a matter of dispute in the years to follow, as manifested by the debates on word-field theory, polysemy vs. homonymy, and the status and justification of semantic features. The climate in English lexicology in Germany, Austria and the German-speaking part of Switzerland was dominated by European Structuralism and by the hope to elucidate the structure of the lexicon and the meanings of words with the help of finer and finer categorical distinctions. This is the backdrop for the following description of the ensuing processes of spreading contextualisation, which reflects a general change in focus away from the neat and tidy aspects of the lexicon to the messy and shambolic ones.

3. Developmental Strands of Contextualisation: From Neatness to Messiness

3.1 From Paradigmatic to Syntagmatic Contextualisation, from System to Norm

The epitome of tidiness in the lexicon is Trier's well-known mosaic image of the word-field, which duly came under attack in the 1970s. In a less strict fashion, but very similar in spirit, Lyons's paradigmatic sense-relations portray the lexicon as a neat system of intricately, but essentially systematically, related word meanings. Similarly, according to Coseriu, whose ideas had a considerable influence on the group of English lexicologists emerging from Tübingen (sometimes referred to more or less facetiously as the Tübingen mafia), Herbert Brekle, Dieter Kastovsky, Len Lipka and Gabriele Stein, a word-field is constituted by the oppositions between words on - and this is the important part - a homogeneous level of language. The potential messiness caused by dialectal or stylistic variation is thus explicitly excluded from the word-field. It is essential to emphasise that the meaning, or sense in Lyons's terminology, of the word itself is also defined with reference to paradigmatic relations and its place in the word-field and is thus contingent on this neat structure.

In short, there was a strong tradition dating back to Saussure of defining the "place" of a word in the lexicon and the meaning of words with reference to paradigmatic relations. Syntagmatic relations, on the other hand, were notoriously underrepresented in lexicological research, in spite of Saussure's discussion of what he called champs associatifs and the currency of the notions introduced by Porzig,
This is not to say, however, that syntagmatic relations and collocations were totally ignored: they did feature prominently in Rosemarie Glaser’s *Phraseologie der englischen Sprache,* which complemented Hansen’s et al. *Englische Lexikologie* in the former GDR. Nevertheless, for semantic theory the crucial pieces of contextual information for a word were its potential rivals in the lexicon rather than its actual companions in an utterance or sentence.

One reason for this view of words is the traditional focus on *langue* rather than *parole,* another classic Saussurean legacy. Being restricted to the perspective of *langue,* paradigmatic relations are comparatively neat - as long as one neglects phenomena like stylistic and dialectal variation, semantic vagueness and polysemy. The moment we focus our attention on the actual use of words in context, it is impossible to turn a blind eye to the enormous variability of words. Unlike paradigmatic relations, syntagmatic ones are probabilistic rather than discrete, and thus less systematic.

Over the last decade, however, the syntagmatic context has gained the upper hand in lexicological research. Concepts like collocation and colligation, semantic preference and semantic prosody have been at the centre of the attention of researchers like Wolfram Bublitz, Jürgen Esser, Susanne Handl, Thomas Herbst, Michael Stubbs, Gunter Lorenz, and myself. The semantic impact of words is now increasingly investigated from a syntagmatic and even textual perspective, which puts emphasis on the interaction between words in actual utterances and the possibilities and probabilities of word combinations. The shift from a paradigmatic focus to a syntagmatic one coincides with a shift from a focus on the system of language not only to its actual use, but also to observable norms of its actual use, another concept taken over quite enthusiastically from Coseriu by the Tübingen school of English lexicologists. What lexicologists are concerned with today is what native speakers actually do with the English language; but in building data-driven, usage-based models of language, they do not just look at language use as such, but try to model the lexical knowledge required for language use and exploit findings on the frequencies of usage of lexical elements as a basis for descriptions.

of the norm. An example of a frequency-based investigation from the field of word-formation is Ingo Plag's *Habilitationsschrift* (1999) on structural constraints in English derivation.

### 3.2 From Armchair to Computer

Two reasons for the move from paradigmatic to syntagmatic and from system to norm are a change in the dominant methodology as well as a growing concern for methodological issues. It is true that partly due to the career requirements of the German academic system - *Habilitation* - large-scale empirical studies have a very strong tradition in this country and the neighbouring German-speaking countries that share the same system. As early as the beginning of the 1970s, there were empirical studies based on corpora of sampled authentic language; for example, Len Lipka's *Habilitationsschrift* on phrasal verbs with *up* and *out* using the material from the Survey of English Usage and additional spoken and written corpora. Nonetheless, the armchair-linguistic method of theory-building was clearly dominant during the 1970s and the early 1980s, especially outside dissertations and *Habilitationsschriften*. Edgar Schneider's *Habilitationsschrift* on the semantics of mental verbs, which is based on material from the Brown and LOB corpora, marks an important milestone in the methodological shift from the armchair to the computer. With the spreading availability of computerised corpora and the rapid increase in affordable computing capacity starting in the early 1990s, the corpus method has become the gold standard of lexicological research even in papers of limited scopes.

As already suggested, this methodological change has had an effect on the theoretical level. The study of words in actual authentic cotext has made it clear that the use of words is not nearly as tidy as structuralist theory had tried to portray it. Whereas the structuralists had still been happy with banishing cotextual variation from their immediate field of interest, corpus linguists have found it difficult, unconvincing and unrealistic to do so and have begun to focus their attention on the less systematic properties of words. This in turn has resulted in a shift of focus from the denotations of words to their connotations.

### 3.3 From Denotation to Connotation

This is another distinct manifestation of the shift from tidiness to messiness: while the beginning of the period under scrutiny is marked by a preoccupation with the denotative semantic aspects of words - which goes hand in hand with a focus on the informational function and a neglect of attitudinal, emotive, expressive and social aspects of language - it has become more and more obvious that the connotations of words are just as important as their denotations. The very concept of semantic prosody, for example, builds on the idea that the connotations of words can have subtle effects on the impact of utterances that reside beneath the denotative surface, as it were, and can be unveiled by violations of collocational patterns.

Of course it would be unfair to say that, in the 1970s and 1980s, researchers were not aware of the importance of connotations. Clearly they were sensitive enough to realise that connotations are part and parcel of word meanings, but both semantic theory and methodology stood in the way of dealing with them seriously. Following the phonological model, lexicologists decomposed word meanings into distinctive semantic features by juxtaposing semantic "minimal pairs" and thus elucidating the nature of the relevant opposition. A useful and comparatively explicit demonstration of this method was, for example, provided by Hansen et al. Often enough, oppositions did not emerge on the denotative but rather on the connotative side of meaning. Nevertheless, the typical way of dealing with this finding was to bar connotations from consideration.

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33 Esser, “Collocation”, 159; Bublitz, “Semantic Prosody”.

34 *Lexikologie*, 174ff.
3.4 From Context-dependent Variation to Built-in Variability

Not only connotations but also other sources of semantic indeterminacy like polysemy and fuzziness of meaning were recognised early enough as sources of tremendous complications for semantic analysis and description. It is revealing to trace the development of how semantic indeterminacy was dealt with in German-speaking English lexicology. An important early milestone was Len Lipka’s concept of variable inferential features, originally introduced in 1980, which were designed to "explain fuzziness of meaning, polysemy, and regional, stylistic, and other variation". Edgar Schneider also made use of variable features. Both Lipka and Schneider seem to be realistic - but not particularly enthusiastic - about indeterminacy. Schneider does give a short discussion of prototype theory and says it is "die bisher ausgereifteste und überzeugendste deskriptive Ausarbeitung des Problems der lexikalisch-semantischen Unscharfe", but still sticks to a traditional framework, though a highly refined one, using obligatory and optional semes and allowing for the possibility of context-sensitive weightings and rearrangements of seme bundles.

With Rainer Schulze's Habilitationsschrift on prepositions published in 1990, René Dirven's papers on verbs expressing linguistic action and on the verb "agree," and my dissertation, prototype theory and cognitive semantics began to gain momentum in English lexicology in Germany. Fuzziness and variability of meaning are characteristic features of the prototype approach, and so is the aim to describe polysemy in terms of networks of interrelated and/or overlapping senses associated with categories. Whereas - according to the structuralist paradigm - potential meaning on the level of langue is, at least ideally, clear-cut, and variability is caused by referential ambiguity and/or contextual interference, in the cognitive-semantic framework, categories are inherently variable and fuzzy. While the structuralist paradigm strives for a neat separation between linguistic meaning and encyclopaedic knowledge (cf. Coseriu's distinction between Bedeutung and Bezeichnung), cognitive semantics decides to ignore the distinction and deliberately accepts world-knowledge and, likewise, connotations as inherent parts of word meanings.

It is not claimed here that cognitive semantics has actually given us a solution to the problem of semantic indeterminacy; the effect of contextual knowledge, for example, is still rather poorly understood in prototype theory. What is emphasised is that there has been a shift from context-dependent variation as some kind of appendix to clear-cut meanings to variation that is treated as an inherent, built-in feature of word meanings.

3.5 Cognitive Context: From Language to the Mind

Cognitive semantics has not only given us prototype theory but has also put words into a new context - the cognitive context. First of all, context itself is no longer understood as linguistic environment plus situational circumstances, but as mental activity. The surrounding text, the text topic, the immediate situation, including the other participants and the wider cultural background - all these classic context

References:
35 Lipka, Lexicology, 130.
36 Variabilität, 148.
37 Variabilität, 138.
factors can only have a bearing on the meaning attributed to a word in a given utterance to the extent that they are known to the speaker or hearer and activated by them in a given situation.

In addition, while words were investigated in the context of paradigmatic oppositions and word-fields in the structuralist paradigm, the cognitive paradigm sees them in the context of cognitive models, i.e. network-like knowledge structures stored in the human brain. As early as 1982 René Dirven headed a group of researchers who applied Fillmore’s frame semantic approach to “the scene of linguistic action” and showed how the verbs *speak, talk, say* and *tell* can be used to perspectivise this scene in different ways.” Cognitive models and frames do not just differ from word-fields with regard to their theoretical status. Unlike word-fields, cognitive models are explicitly open-ended; the concepts constituting cognitive models are of diverse types (persons and organisms, events, quality concepts, etc.), and so are the relations between them.

The past twenty years have been marked by a very active involvement of German researchers in cognitive English lexicology. Two particularly salient areas stand out here. One is categorisation, with a number of contributions by Friedrich Ungerer and myself. Second, there is a substantial body of work on the cognitive-linguistic view of metaphor and metonymy: the important volume entitled *The Ubiquity of metaphor*, edited by Wolf Paprotté and René Dirven with papers by René Dirven, Günter Radden and Winfried Nöth; other publications by René Dirven, Friedrich Ungerer, Olaf Jäkel, and Len Lipka; Olaf Jäkel’s and Monika Bründl’s dissertations; and the recent work by René Dirven, Klaus-Uwe Panther, Günter Radden, and Linda Thornburg on metonymy.


52 Metonymy in Language and Thought, ed. Klaus-Uwe Panther and Günter Radden (Amsterdam: Benjamins, 1999); *Metonymy and Pragmatic Inferencing*, ed. Klaus-Uwe Panther and Linda Thornburg (Amsterdam: Benjamins, 2003).
3.6 An Example from Word-formation: From Zero-derivation to Floating Concepts

Another good example of the shift from neatness to messiness comes from the field of word-formation, which has been neglected so far here. In the wake of Marchand’s monumental work, word-formation has turned out to be one of the areas with the most productive and original contributions to English lexicology by German scholars. Marchand’s ideas were taken up, developed and disseminated by his students Herbert Brekle, Dieter Kastovsky, Len Lipka and Gabriele Stein. In the GDR, it was Klaus Hansen who followed Marchand’s framework and extended it. Although Hansen never actually met Hans Marchand, it is reported that the latter regarded him as his best student.53 A later generation of German-speaking researchers with a keen interest in word-formation and lexical change includes Christiane Dalton-Puffer,54 Roswitha Fischer,55 Ingo Plag,56 and myself.57

The example to be discussed here is the treatment of multiple word-class memberships of words, traditionally known in word-formation as conversions. Marchand tried a different tack with regard to this phenomenon and introduced the notion of zero-derivation in his first edition of his Categories. Arguably, the overall rationale behind the idea that we add a zero-morpheme, for example, to the adjective clean in order to turn it into the verb clean is to keep the system intact. Well-known justifications for the existence of the zero-morpheme can be traced back to this aim: the analogy between overt suffixations, which mark a change in word-class, and the covert marking of the zero-morpheme; the alleged necessity to identify an element that is responsible for the observable change in word-class in the first place; and the need to have an element that fills the second slot in the determinans-determinatum relationship. Apparently the strong desire to keep the system intact overruled all kinds of counterarguments, such as the implausibility of the existence of a zero-morpheme, the enormous problems of attributing a meaning to the zero-morpheme, and the question of how the zero-morpheme can be able to turn out such a large number of different word-class changes, from noun to verb, but also from verb to noun, etc.

While the outside world has never been particularly susceptible to the idea of zero-derivation, the notion was defended for a long time in Germany, at least by the first generation of Marchand’s followers. Now, with the advent of cognitive-linguistic models of word-formation,58 and the shift of focus from the linguistic system to the cognitive underpinnings of language, the zero-morpheme is losing ground, even inside Germany. Where words are treated as linguistic manifestations of cognitive categories and word-classes as results of profiling choices of cognitive units, there is no longer room for an element that does not represent a cognitive unit in the first place.

Whether this may prove to be more convincing or not is in fact not really relevant in the present context. What matters is that the neat systematisation of word-formation patterns is given up in favour of more open and flexible morphological considerations relating to our perception of the outside world, the mental effort required for the profiling of cognitive units and other aspects of the human cognitive system.

54 The French Influence on Middle English Morphology (Berlin: Mouton de Gruyter, 1996).
3.7 An Intermediate Summary

Taking stock of what we have collected so far, a fairly consistent, albeit rather general, picture of what has happened in English lexicology in Germany over the last thirty-plus years can be drawn. The development has been described under the general heading "from neatness to messiness," but it has emerged that this label can be both specified and supplemented by related dichotomies. "Neatness to messiness" is held here to subsume the shifts in focus from system to norm, from paradigmatic to syntagmatic, from denotative to connotative, from language-immanent to referential, cognitive, pragmatic and social. The latter two kinds of contexts, pragmatic and social, were not discussed in detail, but it will be immediately clear that not only the (second) cognitive turn of the late 1980s and 1990s - Chomsky is sometimes seen as having brought about a cognitive turn as well - but also the pragmatic turn of the late 1960s and 1970s has had a lasting impact on lexicology. The move away from the idea of the lexicon as an autonomous linguistic system was to a large extent initiated by the worldwide trend in linguistics to take pragmatic and social aspects into account. However, especially with Karl Bühler's pragmatic legacy in mind, it seemed convenient for German English lexicologists to leave the system behind and turn to considerations of use and norm. Another development that cannot be discussed in detail here is the rediscovery of the onomasiological approach in lexical semantics and word-formation, which sets out from the rather chaotic world of referents and our conceptualisations of the world around us.

Tendencies that can be invoked to supplement this rather crude label "from neatness to messiness" are "from stative to dynamic" and "from interior to external". I will briefly comment on each of these two in turn.

Although Trier's original ideas on word-field theory were inspired by the aim to describe semantic change, European and German structuralism had a distinctly synchronic bent and regarded the lexical system as essentially stable, though of course subject to long-term changes. This image of a fairly stable structure is supported by the high degree of idealisation involved in the idea of la langue, the system shared by proficient native speakers. Currently both the lexicon itself and the words and their meanings are conceived of as being highly dynamic. Built-in variability reflects flexibility rather than stability, connotations vary from speaker to speaker, and so do the individual compositions and structures of their mental lexicons. As with many other developments outlined in this paper, these are by no means new insights; what is more recent, however, is the readiness to face the mess and deal with it in an empirically, theoretically and psychologically sound way.

The idea of a shift "from interior to external" in a way reiterates the title of this paper: spreading contextualisation. Looking back over the last thirty years, we can observe a tendency to go beyond the word and the lexicon to the wider linguistic, pragmatic, social and cultural context. It is true that the word did have a context even in early European structuralism, but, as argued above, this context tended to be limited to its set of paradigmatic neighbours, a few strictly defined syntagmatic relations and a rather nondescript and amorphous notion of context. The lexicon was one component of grammar loosely related to others. Now the word is being investigated from a whole range of new perspectives, and the lexicon has been equipped with interfaces to other semiotic systems (syntax, phonology, pragmatics, non-verbal) and the cognitive and social underpinnings of language use.

4. A Special Case: Ernst Leisi

Before ending this paper with a look into the future I want to draw attention to a very special "German" contribution to English lexicology mentioned only in passing so far: the work of the Swiss linguist Ernst Leisi. In more than one respect, Leisi produced truly pioneering ideas which anticipated later stages of the development of lexicology in Germany and elsewhere. It is perhaps due to the fact that he published most of his books and papers in German that Leisi's influence on the international scene is less strong than it might have been otherwise. Some particularly striking examples of Leisi's original ideas are the following:

- In his book Der Wortinhalt Leisi introduced the notion of hypostatisation to refer to the phenomenon that the existence of a certain word suggests the existence of a neatly bounded entity endowed
with a substance of its own, to which the word refers." What lies behind this is clearly a very fundamental conceptual process, which has recently attracted the attention of cognitive linguists.

- Leisi eschewed the language-immanent idea of meaning held by structuralism and countered it with a distinctly referential one. His so-called operational definition of meaning "Bedeutung ist ein Bezug zwischen der Lautgestalt und allen Gegenständen einer Kategorie" coincides with Eleanor Rosch's early work on categorisation, on the basis of which prototype semantics was later developed.

- His method of decomposing word meanings into so-called "Gebrauchsbedingungen" rather than metalinguistic semantic features implies a pragmatic perspective on meaning which is related to language use. The Gebrauchsbedingungen themselves can be seen as precursors of the attributes seen to be associated with categories in prototype theory.

- Leisi's Praxis includes an extended and sophisticated discussion of metaphor and metonymy predating the metaphor-rush in cognitive linguistics sparked off by George Lakoff and Mark Johnson's *Metaphors We Live By.*

In hindsight, it must be deplored that Leisi's pragmatic and down-to-earth but also forward-looking and inspired approach did not receive more attention outside the German-speaking linguistic community.

5. Coda: Where do we go from here?

Since this historiographical account continues up to the present day, it is impossible to resist the temptation to speculate on where we will go from here. My guess is that lexicology will become even more dynamic, fluid, pragma- and text-linguistically oriented. Especially for abstract concepts, whose meanings are difficult to pin down anyway, there is a good chance that more and more semantic burden will be transferred from the word itself to the linguistic, situational and social context.

It is not unthinkable that there will be a time when lexicology, or at least lexical semantics, becomes obsolete; a time when the idea that words contribute to utterance-meaning will sound naive; a time when utterance-meaning will be seen as being negotiated by the interlocutors in social situations, with words providing no more than the scaffolding for the potential utterance-meanings. Pragmatics and discourse analysis may well prevail eventually and swallow semantics.

On the other hand, for those who continue to believe in the existence and relative stability of word meanings - still a very attractive idea especially for words denoting concrete entities - an important question will probably be to what extent the meaning of words depends on the classic sociolinguistic parameters of gender, age, ethnicity, and, perhaps most prominently, region. Social semantics is still in its infancy: what are the conceptualisations of word-meanings of social groups like males and females, youngsters and oldies, whites and blacks, Indian, Singaporean or Nigerian speakers of English? It may well be that we will see a sociolinguistic turn in lexical semantics in the coming decades following the pragmatic and cognitive turns we have witnessed in the final decades of the 20th century.

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