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"A roundabout story: a cognitive approach to the semantics of the English prepositions about and around"

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To handle a language skillfully is to practice a kind of evocative sorcery.

-- Charles Baudelaire

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## List of abbreviations

COCA Contemporary Corpus of American English

COHA Corpus of Historical American English

DWDS Das Digitale Wörterbuch der deutschen Sprache

GOOGLE-US American Google books corpus

LM Landmark

OE Old English

OED Oxford English Dictionary

TR Trajector

ZEIT Die Zeit corpus

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English loves to stay out all night dancing with other languages, all decked out in sparkling prepositions and irregular verbs. It is unruly and will not obey – just when you think you have it in hand, it lets down its hair along with a hundred nonsensical exceptions.

— Catherynne M. Valente, The Boy Who Lost Fairyland

# 1 Pretty problematic prepositions

Is there a lot of talk *about* or *around* prepositions recently? Both versions have been and are used by native speakers of English – and so a natural question arises: is one of the two prepositions more grammatical, more frequent, or more formal than the other? What factors and conditions influence which of the two is selected? In other words, is there any difference in use or, perchance, any difference in meaning between the two available options? If not, then why the redundancy?

Learning, comprehending and acquiring the English prepositional system continues to present a real challenge for the majority of foreign and second language learners, regardless of their age or proficiency level (e.g., Celce-Murcia & Larsen-Freeman 1999: 250; see also Tyler, Mueller & Ho 2011: 197; Lam 2009). To put it bluntly; "[p]repositions are painful" (Marion 2011: 11), for many learners of English and, on occasion, even for native speakers. Celce-Murcia and Larsen-Freeman (1999: 250) report that they are regarded by teachers as "the second most difficult aspect of the English language", only slightly behind the articles.

On the whole, there appear to be two main sources of difficulty: first, due to the breakdown of the case system, English does not only have a far greater number of prepositions than other languages, but almost each of them can be associated with a vast multitude of meanings, most of which, at first glance, seem to be unrelated and random; second, even prepositions which are treated as cross-linguistic equivalents from a semantic point of view (e.g., English *against*, German *gegen*, and French *contre*) "often do not translate or match up well" (Celce-Murcia & Larsen-Freeman 1999: 250). In sum, the syntactic category of prepositions is felt to be surrounded by a dense and impenetrable cloud of 'unpredictability' and language-specific 'idiosyncracy'.

Despite the enormous problems that prepositions understandably pose for learners in mastering them and for educators in teaching them, it is fair to say that they have been a "neglected part of speech" for centuries. (Taylor 1993: 151). Jackendoff (1973: 345) once complained that "people seem never to have taken prepositions seriously". And, indeed,

until the 1970s, "extensive investigations into the problems related to prepositions" were inhibited by "[t]he radically positivist and realist climate" pervading the discipline of linguistics at that time; it was only "in the wake of Rosch's psychological experiments [...] [that] an increasing number of linguists have changed their basic attitude with respect to what constitutes the nature of linguistic meaning" (Zelinsky-Wibbelt 1993: 2-3). This novel approach to lexical semantics and grammar, which "first started as a reaction against" formal approaches emphasizing "the primacy of syntax" (Barcelona & Valenzuela 2011: 18), came to be known as "[t]he cognitive breakthrough in linguistics" (Zelinsky-Wibbelt 1993:10).

In the theoretical framework of Cognitive Linguistics – as initiated, amongst others, by Ronald W. Langacker (1987), George Lakoff (1987) and Mark Johnson (1987) – "language is all about meaning"; in contrast to traditional approaches, for which language constitutes "a collection of formal, syntactic structures and rules", it is seen as instrumental in the organization, processing and expression of ideas, thoughts and feelings, that is, "as something primarily semantic" (Geeraerts 2006: 3). For cognitive semanticists, "semantic structure is conceptual structure" and, correspondingly, "meaning construction is conceptualization" (Evans, Bergen & Zinken 2007: 7-9): on this view, lexical meaning is thought of as relating to, and connecting with, "concepts in the mind of the speaker rather than" concrete objects or individuals that have a physical and independent existence in the outside world. In consequence, words themselves are not apprehended as carrying meaning; they "are only 'prompts' for the construction of meaning", activating a multiplex of "conceptual relations" and relevant "background knowledge" (ibid.).

Another central tenet of cognitive linguists' conception of meaning is that it is seen as "experientially grounded – rooted in experience" (Geeraerts 2006: 5). The concepts speakers have recourse to and their personal construction of 'reality' "bear the imprint of embodied experience"; experience is embodied in the sense that humans hold a "species-specific view of the world" because of the "nature of [their] bodies" (Evans, Bergen & Zinken 2007: 7), viz. their physiology and neural architecture. Lakoff (1987: xiv) asserts that meaning, i.e. conceptual structure, "grows out of bodily experience and makes sense

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<sup>&</sup>lt;sup>1</sup> This understanding of meaning directly conflicts with the objectivist view, which holds that lexical items "get their meaning via correspondences to things in the external world", turning them into "*internal representations of external reality* [author's italics]" (Lakoff 1987: xii-xiii).

<sup>&</sup>lt;sup>2</sup> Objectivists, on the other hand, treat human thought as being "abstract and disembodied [author's italics]", that is, as "independent of any limitations of the human body, the human perceptual system, and the human nervous system" (Lakoff 1987: xiii).

in terms of it". Spatio-physical experience is said to be fundamental to the development of lexical meaning in general, and prepositional meaning in particular. For instance, the spatial configuration in which a smaller entity is completely encompassed by a second, comparatively larger entity is not "conceived as neutral, but as meaningful and consequential"; it is understood "in terms of, and hence giving rise to, the concepts of containment" (Tyler & Evans 2003: 25). Regular encounters with containers of all kinds are part of everyday life, as pointed out by Tyler and Evans (2003: 25):

For instance, when we wake up, we find ourselves surrounded by walls, floor, and ceiling – we are contained within a room. We move from one room to another and we have moved from one container to another. We open a cupboard in the kitchen and we've opened a large container. We pull out a box of cereal and we pour the contents [...] out of the box-container into a bowl, another container. As we eat the cereal, we are transferring the contents from the bowl into our bodies – which are themselves containers.

It is this assumedly experiential basis of prepositions that has made a formerly grossly neglected word class the center of attention for numerous scholars. During the past three decades, studies on spatial meaning have rapidly increased, initially focusing on the English language (e.g., Brugman 1981; Lindner 1981; Hawkins 1985; Herskovits 1986; Lakoff 1987), and, from the 90s onwards, extending to other European languages such as Dutch (e.g., Cuyckens 1991; Geeraerts 1992; Beliën 2002), French (e.g., Vandeloise 1991), Polish (Bacz 1997; Dancygier 2000) or German (e.g., Wunderlich 1993; Bellavia 1996).

The present thesis is primarily concerned with the semantics of the English prepositions about and around, the first of which is nowadays typically associated with abstract uses (e.g., They waited for about two hours, What's the book about?, She's about to explode), whereas the latter with largely spatial meanings (e.g., There is a garden around the house, She went around the car, The new café is around the corner). Using concepts, ideas and models central to the Cognitive Linguistics framework (see section 2.3), as well as data derived from different corpora (see section 3.1), it attempts to cast new light on the diachronic semantic evolution of about and around and represent, in a lexical network, the interrelatedness of the various distinct senses they code for or used to code for. Furthermore, the analysis of the two prepositions will also make use of cross-linguistic comparison, to show that the semantically related German um may have undergone remarkably similar semantic changes.

In short, the principal aim of the thesis is to demonstrate that, contrary to popular belief, the various meanings of *about* and *around* are related, systematic and, to some

extent, predictable (see section 3.4), which is in agreement with most recent findings in cognitive semantics. However, the fact that a single lexical item is capable of expressing a multiplicity of senses remains a contentious subject in linguistics to the present day. It is a phenomeon that has been approached and accounted for in a variety of ways, the most important of which will be presented in section 2: the homonymic, monosemic, and polysemic approach to lexical meaning.

— Isaac Newton

# 2 Attempts to capture a word's multiple meanings

The beginning of Cognitive Linguistics in the 1980s was characterized by its "renewed interest [...] in the analysis of meaning" with an increased focus on polysemy (Lewandowska-Tomaszczyk 2007: 139-140),<sup>3</sup> which is commonly defined as "the association of two or more related senses with a single linguistic form" (Taylor 2003: 102-103). By incorporating notions from the philosophy of language (e.g., Wittgenstein 1958) and insights from psychological research (e.g., Rosch 1978), Cognitive Linguistics has provided plausible explanations for the remarkable polysemy exhibited by most lexical items in a language. The semantics of a word is no longer conceived of as a "single, unitary structure", but as a complex array of meanings that are systematically interrelated by dint of general cognitive principles (Cuyckens & Zawada 1997: xiii). To be sure, even prior to the advent of Cognitive Linguistics, scholars such as Michel Bréal (1991 [1887]) and, later, Stephen Ullmann (1951) pointed to the importance of polysemy for the study of word meaning: while the former (1897: 155) coined the term polysémie and initiated its use in the field of linguistics, the latter (1951: 117) identified the question of polysemy as the "pivot of semantic analysis". However, in the historical-philological tradition, truly polysemous items were widely considered to be "the unusual case", whereas homonymic and monosemic views on lexical meaning represented "the norm" (Cuyckens & Zawada 1997: xii). In the following it will become apparent that each of the approaches to lexical semantics has, without doubts, its inherent weaknesses and methodological limitations, but also that out of the three, the polysemy framework, heavily favored by cognitive linguists, might indeed be most adept at effectively dealing with the plethora of meanings associated with a single linguistic form.

<sup>&</sup>lt;sup>3</sup> Nerlich and Clarke (2003: 3), in turn, relate "the recent upsurge of interest into polysemy" to "a renewed interest into the cognitive bases of figurative language".

<sup>&</sup>lt;sup>4</sup> Bréal (1897: 154-155) first used the term in his celebrated *Essai de sémantique*:

Le sens nouveau, quel qu'il soit, ne met pas fin à l'ancien. Ils existent tous les deux l'un à côté de l'autre. Le même terme peut s'employer tour à tour au sens propre ou au sens métaphorique, au sens restreint ou au sens étendu, au sens abstrait ou au sens concret... À mesure qu'une signification nouvelle est donnée au mot, il a l'air de se multiplier et de produire des exemplaires nouveaux, semblabes de forme, mais différentes de valeur. Nous appelons ce phénomène de multiplication la polysémie [author's italics].

## 2.1 Homonymy

Traditionally studies concerned with "the mental lexicon" have, for the most part, either paid relatively little attention to the relations between a single lexical item and the various meanings it can code for, or claimed that they are "arbitrary" and hence "unrelated" (Tyler & Evans 2003: 1). In other words, the association of a single linguistic form with several distinct senses<sup>5</sup> was, in the traditional view, a matter of mere coincidence; they simply "happen to share the same phonological form" (Tyler & Evans 2001: 725; see also Croft 1998: 156; Lakoff 1987: 416), and the several form-meaning pairings should, accordingly, be treated as "a set of homonyms" (Bloomfield 1935: 145). Although scientists outside the world of linguistics such as, for instance, Brown and Witkowski (1983: 72) believed that the analysis of polysemous words might prove fruitful in shedding some light on the inner workings of human cognition, the homonymic view received substantial help from one of the most influential and dominant linguistic theories in the second half of the 20th century. Transformational Generative Grammar, which basically negates "the existence of polysemy on theoretical grounds" (Lewandowska-Tomaszczyk 2007: 139),6 and maintains that a language's "creativity and systematicity" solely fall into the domains of syntax and morphology, while the lexicon is deeply marked by its haphazard and unpredictable nature (Tyler & Evans 2003: 4); or to use the words of the generativist Noam Chomsky (1995: 30), it is seen as a "repository of all (idiosyncratic) properties of particular" lexemes, providing information pertaining to their "phonological form", "syntactic category" and "semantic characteristics". In sum, this position draws a clear dividing line "between a highly productive rule-governed grammar and a lexicon that houses the arbitrary" (Tyler & Evans 2003: 38), which Langacker (1987: 42) would later refer to as the "rule/list fallacy".

Naturally, this formalist and modular view of the lexicon significantly influenced traditional studies on spatial terms, such as those conducted by Lindkvist (1950, 1972, 1976), Heaton (1965), Wood (1967), Hill (1968), and Bennett (1972, 1975). Apart from the fact that they centered mainly on European languages, in particular on English, all of them, in spite of their different theoretical backgrounds, were primarily preoccupied with

<sup>&</sup>lt;sup>5</sup> For stylistic reasons, in the present thesis, the terms 'sense', 'meaning', 'use' and 'usage type' will be used interchangeably, with no meaning difference implied.

<sup>&</sup>lt;sup>6</sup> For an example of a generative analysis of lexical meaning, adopting a strong homonymic standpoint, see, e.g., Katz and Fodor (1963).

<sup>&</sup>lt;sup>7</sup> Geeraerts (1995: 112-113) counters that lexical items may be seen as a "repository", but with fundamentally different content; they are a "repository of world knowledge, a structured collection of meaning categories that help us deal with new experiences and store information about old ones."

<sup>&</sup>lt;sup>8</sup> For traditional studies on French prepositions, see, e.g., Poitier (1961, 1962).

the creation of so-called "*lists of uses* [author's italics]" (Svorou 2007: 733; see also Lewandowska-Tomaszczyk 2007: 139). An example of such a catalog of usage types for the preposition *about* is given below (adapted from Heaton 1965: 1):

**about** (1) concerning, of. He talked about his old friend.

- (2) near(ly), approximately (a place, a time, a quantity, etc.). *It was about two o'clock when he left. The bomb fell about here.*
- (3) here and there, in various parts of, all around. The traveler roamed about the town trying to find a suitable. We wandered about the city on our first evening there.

As can be seen, no attempt is made to explain why exactly these uses – and not others – are expressed by the preposition *about* and if/how they might be related to each other. The position adopted, thus, appears to correspond with the widespread popular belief that "prepositional usage is idiomatic and 'just has to be learnt'" (Taylor 2003: 112). "Popular conceptions of language", according to which "the essential reference tools" of any language learner are "the dictionary and the grammar book", can be construed as a reflection of the Chomskyan description of language and its strict division into lexicon and syntax (Cuyckens, Dirven & Taylor 2003: 4).

Although the homonymy approach enjoyed, and partly continues to enjoy, considerable popularity among semanticists, it suffers from several severe deficiencies: first of all, a homonymic stand, which disregards diachronic information available, completely fails at "represent[ing] language as an evolving system", since it is incapable of providing any driving force behind language change (Tyler & Evans 2003: 5). A view that presents the semantics of a lexical item in a list-like fashion, as dictionaries normally do, implies that its usage types are more or less "frozen", that it merely has a supposedly static, predetermined and limited supply of meanings at its disposal (Pustejovsky & Boguraev 1994: 298). It is, however, universally acknowledged that a word's historical development involves "an 'unfolding' of [its] usage potential" and, concurrently, "a 'collapse' of other usages", which makes it an inherently "dynamic phenomenon [emphasis added]" (Sandra & Rice 1995: 100-101).

Further, a dictionary approach to the semantics of a lexical item does not "make any provisions for the notion that boundaries between word senses may [...] shift with context" (Pustejovsky & Boguraev 1994: 298). On the contrary, it suggests well-demarcated boundaries between the individual homonymic senses, which is especially not valid for the syntactic category of prepositions. Quirk et al. (1985: 695), the authors of the well-known grammatical compendium *A comprehensive grammar of the English language* felt obliged to concede that the classification of prepositional semantics is

"notoriously difficult" and that "in some cases it is better to think of a range or spectrum of meaning".

Lastly, homonymy is *per definitionem* "an accidental phenomenon" and, consequently, seen as entirely "language specific". However, "[t]he attestation of similar senses in different and, especially, in historically unrelated languages" practically excludes the idea of "chance homonymy" and, in its place, highly suggests systematically structured categories (Taylor 2003: 107), a stand which has also been backed up by experimental empirical research (e.g., Sandra & Rice 1995; Rice 1996; Rice, Sandra & Vanrespaille: 1999). Indeed, the very pervasiveness of the phenomenon, which made the compilation of such lists of uses seem necessary, can be interpreted as an indication of their "polysemous nature" (Svorou 2007: 733). Proponents of homonymy are, hence, accused of demonstratively closing their eyes to the conspicuous "ubiquity of the phenomenon" (Tyler & Evans 2003: 6), and being quite content with producing lists of an item's multiple meanings, a practice which is certainly "neither the only way, nor [...] the most efficient way, of storing such semantic information" (Brugman & Lakoff 1988: 109).

Not surprisingly, in the course of time, and, in particular, with the arrival of the Cognitive Linguistics paradigm, the homonymic stand has been largely rejected and given way to monosemy and polysemy analyses, two approaches which are often subsumed under the label of the "minimalist/maximalist" or the "abstractivist/cognitivist" distinction (Nerlich & Clarke 2003: 14). These two strategies of lexical analysis have been described by Posner (1980: 645) as follows:

Meaning-maximalists attempt to deduce as much as possible from the literal meanings of verbal expressions and tend to assume richness and ambiguity in the meanings of words. On the other hand, meaning-minimalists attribute more importance to the pragmatic rules of reinterpretation as opposed to literal meanings and tend to accept only minimal meanings and unambiguous words.

#### 2.2 Monosemy

By tradition, theoretical semantics has tended to give preference to a "single meaning approach" (Taylor 2003: 148), which has its origins in structuralism (Lewandowska-Tomaszczyk 2007: 152). A famous defender of this approach is Roman Jakobson (1936:

<sup>&</sup>lt;sup>9</sup> This, of course, does not apply to items which are real homonyms such as, for example, the two words *bank* 'the side of a river' and *bank* 'financial institution' (e.g., Lakoff 1987: 416); their "forms happen to be identical for historical reasons but [their] meanings are etymologically unrelated" (Lewandowska-Tomaszczyk 2007: 142).

35), who in his discussion of the Russian case system made an attempt to assign each grammatical case a "Gesamtbedeutung", i.e. a stable, general meaning of an abstract nature, while "Sonderbedeutungen", i.e. specific uses of an item, stem from combining the abstract general core of a word with linguistic contextual information - which he paraphrases as "die kombinatorischen Varianten der Gesamtbedeutung". Although the two concepts of "Gesamtbedeutung" and "Sonderbedeutungen" had been developed and applied by Jakobson to explain a grammatical phenomenon, they were soon put into practice, and elaborated upon, in studies of lexical meaning. Some prominent proponents, and successors, of Jakobson's minimalist view are, for example, Garcia (1975), Andrews (1976) and Posner (1980).

Recently, however, the monosemy approach is most often associated with work done by Ruhl (1989), which arose from a general dissatisfaction with the polysemy approach, vigorously advocated by Lakoff and Johnson (1980). According to Ruhl (1989: 1), all words with multiple meanings, irrespective of the syntactic category they belong to, i.e. even high frequency words such as prepositions, "have only one single general meaning [emphasis added]". The "Monosemic Bias", a label introduced by Ruhl (1989: 24), is a position that seeks a complete separation between semantics, which is construed as the abstract level of language, and pragmatics, which, due to its inclusion of contextual cues and world knowledge, represents the most elaborated level (Lewandowska-Tomaszczyk 2007: 152). It can then be said that the radical<sup>10</sup> monosemy approach works toward "an abstract, minimal semantic representation for a decontextualized general sense", which in interaction with contextual information – be it linguistic or extra-linguistic – gives rise to a virtually infinite number of specific local uses (Lewandowska-Tomaszczyk 2007: 153). In other words, it aims at identifying the semantic core of a lexical item that is both minimal and abstract, and, equally important, forms part of the lexical structure of all other extended senses.

To some extent, the monosemic approach has also been implemented in the 'two-level approach', put forward by Bierwisch (1983) and Bierwisch and Lang (1987), two German linguists, who make a distinction between a lexeme's semantic, purely linguistic level, on

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<sup>&</sup>lt;sup>10</sup> Ruhl (1989: ix) himself admits that he appears to be "taking a severe minimalist position, just barely short of zero".

<sup>&</sup>lt;sup>11</sup> Here it may be noted that the contextual constraints Jakobson (1936: 35) had in mind were solely of a linguistic nature and, as such, restricted to the co-text: [Die] einzelnen Sonderbeutungen [werden] durch verschiedenartige Wortgefüge, bzw. durch verschiedenartige, formelle und reelle Bedeutungen der umgebenden Worte bestimmt". This view, according to Tyler and Evans (2003: 8) is too limited, given that words and "syntactic configurations in which they occur [...] provide only minimal prompts for meaning construction."

the one hand, and a conceptual, pragmatic, on the other.<sup>12</sup> As regards the study of prepositional meaning, a monosemic view was adopted, for example by Vandeloise (1990) for the English preposition *over*, as well as by Beliën (2002), who investigated the semantics of the Dutch prepositions *aan* 'on', *op* 'on' and *tegen* 'against' by means of "Platonic concepts, single maximally schematic concepts [...] that may adapt under contextual pressure" (Beliën 2002: 208).

By virtue of its "maximum generality and economy" (Taylor 2003: 150), the monosemic position on meaning variation might, at first sight, sound appealing; on closer inspection, however, several weaknesses come to the fore, many of which are diachronic considerations (Lewandowska-Tomaszczyk 2007: 153). To begin with, similar to the homonymic stand, the monosemy approach is unsuccessful in providing the motives behind changes in the semantic structure of lexical items. It ignores that "[w]hat might start out as a one-off, context-dependent extension" may, in due course and through continued application, attain "the status of an established sense" (Taylor 2003: 163), a process which has been noted and described by Geeraerts (1985) for the Dutch word type, for instance. Moreover, diachronic research into several genetically diverse languages has unequivocally shown that semantic evolution is uni-directional, that is, concrete meanings serve as the springboard for more abstract meanings, not the other way round (e.g., Traugott & Heine 1991: 4; Sweetser 1990: 18). In a related vein, Brown and Witkowski (1983: 72) have demonstrated that the semantic development of a word is closely connected to the notion of 'saliency'; they have observed (1) that in many languages, the two body parts 'eye' and 'face', which share a metonymic relation, are covered by one and the same expression, and (2) that the "development commonly involves expansion of 'eye' terms to face", and not vice versa, as greater "cultural importance" is attached to the former (Brown & Witkowski 1983: 73). It follows that the less salient meanings result from the more salient ones, an observation which can hardly be accounted for by a monosemy approach.

Further, several objections made against the monosemic view are related to the posited primal sense, putatively present in all other extended senses. Owing to the core's extremely high degree of abstractness, the semantic boundaries of a word become so fuzzy that it is almost impossible to effectively delineate it from other items (Langacker 2007: 433; see also Lakoff 1987: 416; Tyler & Evans 2003: 7). Second, the primal sense

<sup>&</sup>lt;sup>12</sup> A more current account of the two-level approach is offered in Bierwisch and Schreuder (1992). For a similar approach to variable meaning, see also Searle (1983).

is bereft of actual meaning to such a great extent that it barely resembles "what people think of as the meaning of a word" (Lakoff 1987: 416). It has been argued that, in contrast with more specific, semantically rich senses, the postulated highly abstract general meaning is hardly accessible to language users by introspective means (Taylor 2003: 162). Taylor (2003: 148) notes that this single abstract definition has virtually no use for lexicographers, "in that the dictionary user [...] would still need information on the specific range of uses sanctioned by linguistic convention." Similar remarks were given by Wierzbicka (1980: xv) with regard to Jakobson's monosemic analysis of the Russian cases; she argues that a learner of Russian is incapable of successfully acquiring them by merely resorting to his highly abstract "formulas". Supporting empirical evidence for Wierzbicka's claim has been provided by Sandra and Rice (1995: 124), who, based on their experimental findings, seriously question whether a monosemic view of lexical semantics can be an adequate reflection of language users' mental representations. Cuyckens, Sandra and Rice (1999: 70) likewise conclude that their results obtained from a number of psycholinguistic experiments are far from being "compatible with a strong monosemy view." The same conclusion has been drawn by Rice, Sandra and Vanrespaille (1999: 124), who explored the semantic range of several English prepositions.

Lastly, the monosemic stand which claims that each meaning of a lexical item can be derived, on equal grounds, from a unitary semantic meaning is incongruent with the existence of well-recorded prototype effects, according to which certain instantiations of an item possess a more "privileged status in the mental lexicon and can be accessed more easily than others" (Taylor 2003: 162). It is also incompatible with the prototype's "role in spawning extended and more schematic senses (both developmentally and diachronically)" (Langacker 2007: 432-433).

At the end of the day, cognitive linguists who refuse to demarcate semantic information from encyclopedic information rejected the "parsimonious monosemic approach" (Lewandowska-Tomaszczyk 2007: 154), and instead show a marked preference for the polysemic view (e.g., Brugman 1981; Lakoff 1987; Tyler & Evans 2001, 2003). Polysemy, according to Cuyckens and Zawada (1997: ix), has henceforth definitely developed into "a core area of study in Cognitive Linguistics", whereas the search for an abstract minimal core supplemented by situated knowledge is slowly, but surely, shifting to the background of cognitive semantics.

## 2.3 Polysemy

If Langacker (1991: 172) were to believed, it is self-evident that polysemous items are "the normal state of affairs". In truth, in the early years of the cognitive linguistic enterprise, it has been especially the dense polysemy displayed by spatial terms, along with the "experiential basis" supposedly underlying their semantic structure, that has attracted most scholarly attention (Svorou 2007: 726). Of all word classes, prepositions are assumed to be "amongst the most polysemous words in English, and in other languages", with their multiplicity of meaning "verg[ing] on the chaotic" (Taylor 2003: 112). While, as seen above, traditional linguistics did not show much interest in the ubiquity of the phenomenon, Cognitive Linguistics has "taken up the challenge of the alleged arbitrariness of prepositional" meaning, so that the disclosure of its rich structural complexity is nowadays perceived of as being "one of the major achievements of the cognitive paradigm" (Taylor 2003: 112). 13

### 2.3.1 Against the classical theory

The Cognitive Linguistics approach to the study of polysemic words has, on the whole, drawn on three descriptive models, prototypicality, radial sets and schematic networks, all of which give particular prominence to "the flexibility of meaning" (Lewandowska-Tomaszczyk 2007: 141; see also Geeraerts 2006: 9-10). <sup>14</sup> In this way, cognitive linguists clearly distance themselves from traditional views on categories (be they philosophical, psychological, anthropological, or linguistic), according to which inclusion in a category is an "all-or-non phenomenon" and defined by a word's "possession of a simple set of criterial features", as Rosch and Mervis (1975: 753) put it. This conception of category also became known as the Classical Theory, with roots reaching as far back as to the Greek philosophers Plato and Aristotle (Taylor 2003: 20). Via work in philosophy and logic, it ultimately found its way into psychology and linguistics, where it was first applied to the area of phonology, as pointed out by Rúa (2005: 60).

It is specifically the classical model's equation of lexical meaning with a bundle of defining features meeting "the necessity-cum-sufficiency requirement" (Geeraerts: 1989:

<sup>&</sup>lt;sup>13</sup> For a, certainly non-exhaustive, list of some of the "foundational studies" on the semantics of adpositions, see Svorou (2007: 726).

<sup>&</sup>lt;sup>14</sup> For a detailed discussion of the various tests (e.g. the logical test, the linguistic ambiguity test, the definitional test) offered in the literature to demarcate polysemy from vagueness, see Geeraerts (1993), Tuggy (1993) and Dunbar (2001).

142) that prototype theory takes issue with and is a reaction against. This classical school of thought – Fillmore (1975: 123) once provocatively termed it "the checklist theories of meaning" - has been extremely popular with, and widely accepted by, generativists, above all Katz and Fodor (1963), who in this Zeitgeist launched their now famous analysis of the English noun bachelor. 15 They represented its semantics by means of four semantic attributes, that is, [HUMAN], [MALE], [ADULT], and [NEVER MARRIED] (Katz & Postal 1964: 13); conversely, the epithet 'bachelorhood' could be assigned to any entity displaying all of these four features. Only a decade later, this featural analysis is seriously challenged by Fillmore (1975: 128), who raises the thought-provoking question whether it would then be "correct to say of Pope John XXII that he died a bachelor", since in strict adherence to the postulated essential features of the category, he does qualify as a member. Notwithstanding this logical line of reasoning, it is certainly safe to say that "most people would not call him a bachelor" (Kövecses 2006: 68). Fillmore (1975), therefore, comes to the conclusion that these four criterial features, [HUMAN], [MALE], [ADULT], and [NEVER MARRIED], are inadequate and insufficient for capturing the meaning of certain, more peripheral members, such as The Pope or Tarzan. The inflexibility of classical categorization with regard to category boundaries prevents it from adapting adequately to less central members (Kleiber 1988: 8). In this case, the marginal cases, *Tarzan* or *The Pope*, are better explained in terms of 'frames', "structured mental representation[s] of a conceptual category" (Kövecses 2006: 64), or in terms of ICMs, short for 'idealized cognitive models' (Lakoff 1987: 70), two approaches that are both firmly linked to prototype theory.

Whatever one may think of the appropriateness of a componential analysis of word meaning, it is an undeniable fact that "it served a great heuristic value for over two millennia of scientific and philosophical research" (MacWhinney 1989: 196), and, on the surface, it seems capable of describing "the semantic relationship that holds between words and between sentences" in an efficient and elegant fashion (Taylor 2003: 35). One of the main reasons for its immense success and its longevity may be that is in line with language users' intuitive reasoning that categories seemingly possess rigid boundaries (Kleiber 1988 cited in Rúa 2005: 77). However, as time passed, the alleged benefits proved "largely illusory" (Taylor 2003: 35). Although the existence of categories structured in classical terms, i.e. with strict boundaries and no gradience among its

<sup>&</sup>lt;sup>15</sup> The concept of *bachelor* has also been analyzed by Fillmore (1982a) and Lakoff (1987), using a Cognitive Linguistics framework.

members, is not completely denied by cognitive linguists (e.g., Lakoff 1987. 45; Geeraerts, Grondelaers & Bakema 1994: 50), they have convincingly demonstrated that they are the exception rather than the rule. Clear-cut categories, without any degree of fuzziness, are largely restricted to specific groups of lexical items such as kinship or scientific terms (Rúa 2005: 78).

One of the main disadvantages of the classical feature analysis is its assumption that a word's meaning can be encompassed in its totality by a definite number of properties, which "taken together suffice to delimit that concept from all others" (Geeraerts 1989: 142). Leaving aside that the process of "deciding which attributes go on to the list" is problematic in itself (Aitchison 2003: 45), some categories, however, simply cannot be stripped down to a "distinct set of necessary and sufficient attributes" shared by all its members (Eysenck & Keane 2005: 298). The inadequacy of the equality-of-features has been exemplified by Geeraerts for the natural category of *birds* (1986: 277):

there are not many attributes that are common to all birds and that could therefore be listed as necessary: ostriches and penguins cannot fly, kiwis do not have wings, penguins and kiwis do not have clearly distinguishable feathers, and so on. On the other hand, those characteristics that are universal among birds are not sufficient to distinguish birds from other species (in particular, reptiles lay eggs, and the duck-billed platypus has a bill).

This illustrative example also shows that an application of the classical all-or-nothing principle leads to a complete disregard of typical properties common to the majority of birds, such as, for example, their ability to fly (Kleiber 1988: 8). As Lakoff (1987: 416) concludes, the classical approach "has no adequate means of characterizing the situation where one or more senses are 'central' or 'most representative'".

Additionally, the more structurally minded advocators of the componential model, who believe in the existence of a "purely linguistic structure of semantic oppositions", continue to insist on separating meaning phenomena (semantic level) from a speaker's world knowledge (encyclopedic level), a distinction which has been abandoned by a number of cognitive linguists on the grounds that, if linguistic categorization is considered "a cognitive phenomenon just like the other cognitive capacities of man, it is important to study it in its relationship to these other capacities" (Geeraerts 1989: 142; see also Lakoff 1987; Tyler & Evans 2001, 2003); prototype theory, hence, argues for "a non-criterial conception of categorial structure, and an interdisciplinary methodological perspective" that does not shy back from using findings and results from other cognitive sciences (Geeraerts 1989: 142-143).

## 2.3.2 Prototype theory

Eleanor Rosch's (1973, 1975, 1977; Rosch & Mervis 1975) psycholinguistic studies of categorial structure are generally seen as the beginning of prototype theory (Geeraerts 1989: 141), and ever since, this theory has found wide and extensive application in the field of linguistics (e.g., Wierzbicka 1985; Lakoff 1987; Langacker 1987; Rudzka-Ostyn 1988; Taylor 2003). Prototype theory's appeal in the linguistic community might, on the one hand, be attributed to the structural semantics' failure to address, and properly deal with, the great flexibility, fuzziness and dynamicity of lexical meaning; on the other, it turned out to be a highly "productive theory", not only with regard to lexical semantics, but also other branches of linguistics<sup>16</sup>, inter alia phonology, morphology, syntax or historical linguistics; and moreover because, in contrast to "Chomskyan linguistics", which favors "a strictly autonomist methodology", a characteristic feature of prototype theory is its "interdisciplinary openness" (Geeraerts 1989: 144-145).<sup>17</sup>

In general, prototype theory is taken to have the following four, systematically related characteristics (Lewandowska-Tomaszczyk 2007: 145), which can, but need not co-occur (Geeraerts 1989: 146):

- (1) A category, as illustrated in section 2.3.1., cannot be structured by means of a set "of individually necessary and jointly sufficient features" (Lewandowska-Tomaszczyk 2007: 146).<sup>18</sup>
- (2) Categories may be "blurred at the edges" (Geeraerts 1989: 146), i.e. occasionally "the boundaries of a concept may be vague" (Lewandowska-Tomaszczyk 2007: 145). That "category boundaries are not necessarily" well defined, as argued by Mervis and Rosch (1981: 109), has been underpinned by a number of empirical studies (e.g., Berlin & Kay 1969; Labov 1973; McCloskey & Glucksberg 1978; Kempton 1978).
- (3) Categories may display a certain degree of gradedness; not all of the members are "equally representative for a category" (Lewandowska-Tomaszczyk 2007: 145; see also Geeraerts 1989: 146). Even "in the total absence of information about [a

<sup>&</sup>lt;sup>16</sup> For a list of studies instigated by such extensions of the prototype approach, see Geeraerts (1989: 145).

<sup>&</sup>lt;sup>17</sup> Rosch's and her colleagues' research had also a powerful impact on information-processing psychology, and more specifically on formal psycholexicology, which is concerned with the mechanisms behind human conceptual memory, as pointed out by Geeraerts (1989: 141). For comprehensive summaries of research conducted in this field, see, e.g., Smith and Medin (1981), as well as Medin and Smith (1984).

<sup>&</sup>lt;sup>18</sup> It should be borne in mind, however, that the possibility of strict categorization is not dismissed from the outset. Some categories – mostly kinship and scientific terms, as pointed out above – can be described by sets of necessary and sufficient features.

category's] boundaries", some members are unanimously judged as "clear[er] cases of category membership" than others (Rosch 1978: 98). This was presumably first discovered by Berlin and Kay's (1969) investigation into 'basic color terms' (e.g. black, white, green, etc.). Their findings also proved to be consonant with results from later studies on prototype structure within the domain of color (e.g. Heider, 1971, 1972; Mervis, Catlin & Rosch 1975). Interestingly, gradedness can also be found in categories expressed by other word classes than nouns, such as verbs (e.g., for English lie, climb and verbs of killing, see Coleman & Kay 1981; Fillmore 1982b; Pulman 1983, respectively), adjectives (e.g., Dirven & Taylor 1988) or prepositions (see section 2.3.5). It also crops up in other, rather unexpected, domains: Armstrong, Gleitman and Gleitman (1983) have, for example, demonstrated that the mathematical category of *odd number* is also affected by prototypicality effects, which may be explained by the fact that non-experts view numbers differently from mathematicians, for whom "any (positive whole) number is just as much a number as any other number" (Taylor 2003: 73). To master their daily interactions as effortlessly as possible, non-experts, by contrast, have recourse to, and make use of, different submodels of numbers, such as "the powers-of-ten model, the multiples-of-five model, [or] the powers-of-two model" so that over time specific numbers have gained "a privileged status" (Lakoff 1987: 150-151), as they simply feature more frequently in everyday life.

(4) Category members are arranged in a cluster-like fashion with partially overlapping meanings (Lewandowska-Tomaszczyk 2007: 145; Geeraerts 1989: 146), a categorial organization which was first put forward by the philosophers Wittgenstein (1958) and Quine (1953; 1960).<sup>20</sup> Tackling the multitude of meanings associated with the German noun *Spiel*, Wittgenstein<sup>21</sup> (1958: 32) eventually concludes that

<sup>&</sup>lt;sup>19</sup> For the criteria used to determine what constitutes a basic color word in a given language, see Berlin and Kay (1969: 6).

<sup>&</sup>lt;sup>20</sup> Rúa (2005: 89) notes that, strictly speaking, the philosopher Peirce's (1931: 87-88) discussion on categories already anticipates notions that bear resemblance to Wittgenstein's similarity structure. He states that "it may be quite impossible to draw a sharp line of demarcation between two classes [...]. Namely, this will happen when the form about which the individuals of one class cluster is not so unlike the form about which the individuals of another class cluster." Kleiber (1988) traces the roots of prototype theory even farther back, i.e. to D. Stewart, a Scottish philosopher in the first century of the 19<sup>th</sup> century.

<sup>&</sup>lt;sup>21</sup> However, Wittgenstein does not talk about prototypes, i.e. central members that serve as "a point of reference for the categorization of other items" (Rúa 2005: 92). In his treatment of the usage potential of the German word *Spiel*, he makes no explicit mention of "the possibility that some games might be better examples of the category than others"; on the contrary, he appears "to give all games the same status within the category" (Taylor 2003: 118), which might explain why Givón (1989: 51) found it hard "to read into Wittgenstein's text an explicit elaboration of the prototype alternative to Platonic categories." On the other

they take the form of "a complicated network of similarities overlapping and criss-crossing: sometimes overall similarities, sometimes similarities of detail", a structure which reminded him of the similarities between family members and he thus termed 'family resemblance'.<sup>22</sup> It refers to a relationship between multiple senses expressed by a word that takes "the form AB, BC, CD, DE", that is, every sense shares one or more features with at least one other sense, yet only few, if any, are shared by all senses of a category (Rosch & Mervis 1975: 575). Thus, it follows that "no common core can [...] be identified for all category members" (Lewandowska-Tomaszczyk 2007: 146).

The different prototype effects, as outlined in the four typical features of prototypicality above, "may have very different sources" (Geeraerts 1997: 17; see also Lakoff 1987: 56), yet the following two are most frequently encountered in the literature (Lewandowska-Tomaszczyk 2007: 149). In the first place, it seems an extremely efficient, and also cognitively economical, way to try to understand new phenomena against already existing concepts (Lakoff 1987: 70). Because of their cluster-like organization, prototypical categories have a high "informational density" so that most data is easily retrievable; they are structurally flexible and effortlessly "adapt [themselves] to the ever-changing circumstances in the outside world", but at the same time they are stable enough to preserve "the overall structure of the system" (Geeraerts 1997: 112-113).

Another possible source for prototypical categories are what Rosch (1978: 91) has termed the "basic level" terms of language. They represent the "level at which (in the absence of reasons to the contrary) people normally conceptualize and name things" (Taylor 2003: 50). Words at the basic level of categorization, such as *dog* or *chair*, might be preferred by language users, as, dissimilar to superordinate terms, such as *animal* or *furniture*, they are "richly specified both perceptually and functionally" (Zubin & Köpcke 1986: 146). Thus, prototype categories may originate in an "overall attempt to maximize

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hand, Wittgenstein (1958: 33) mentions, almost in passing, that, when teaching a child the concept of 'Spiel', one would make reference to a typical example of a game, not any game that comes to mind:

Someone says to me: "Shew the children a game." I teach them gaming with dice, and the other says "I didn't mean that sort of game." Must the exclusion of the game with dice have come before his mind when he gave me the order?

The dialog demonstrates that a 'game with dice' is not considered suitable for teaching children what a game is, which points to its status as a peripheral member of that category. This, in turn, intimates that Wittgenstein might have acknowledged category gradedness.

<sup>&</sup>lt;sup>22</sup> For further examples of an Wittgensteinian analysis, see, e.g., Matthews (1979), Fodor (1981) and Fillmore (1982b), who offer discussions of the meaning of *pin*, *paint* and *climb*, respectively.

cue validity", usually associated with concepts at the basic and primary level of categorization (Lewandowska-Tomaszczyk 2007: 150).

#### 2.3.3 Radial sets

The family-resemblance structure of prototype theory, in particular, has met with an enthusiastic response in Cognitive Linguistics. Moreover, "[t]he recognition that the same structural characteristics" found in a single meaning can be extended and applied to "polysemic sets of meanings" has given rise to the radial set model, so to speak, "[t]he extended version of prototype theory" (Lewandowska-Tomaszczyk 2007: 147). It was first presented in Lakoff (1987) and inspired subsequent studies by Brugman (1981), Janda (1990), Nikiforidou (1991) and Goldberg (1992).

According to Brugman and Lakoff (1988: 111-112), the lexical representation of a word involves "two levels of topological structure", namely the "level of semantic content" and "the level at which that content is structured": at the first level, each meaning expressed by a lexical item exhibits "a complex topological structure"; at the second level, all the meanings as a whole are said to take the form of "a radial category, which is itself a complex topological structure." As a consequence, "the nature of prototypicality" at the first level might, or even is likely, to differ from the one at the second level; put differently, what serves as the prototype of a lexical item might not be the prototypical sense for all the senses associated with it (Brugman & Lakoff 1988: 112). The prototype, the central sense of a category, does remain "the starting point for categorization" and also may be perceived as being the "most representative" by language users, but it ceases to be the reference point for all items subsumed under that category, since it may contain a number of subcentres which themselves have become points of reference for a certain set of members (Rúa 2005: 170).<sup>23</sup> In essence, "any node in a meaning chain can be the source of any number of meaning extensions" (Taylor 2003: 111; see also Brugman & Lakoff 1988: 109; Tyler & Evans 2001: 746), and "the creation of [...] secondary foci [author's emphasis]" is, according to Dahl (1985: 11), attributable to, and intricately linked with, "the formation of polysemic items".

<sup>&</sup>lt;sup>23</sup> According to Lakoff (1987: 18), the polycentric categories of senses were already hinted at by the philosopher John Austin in his renowned paper "The Meaning of a Word", and he therefore considers him a "precursor of the contemporary view of polysemy" (14). Austin's (1961: 71) use of the term "*primary nuclear* sense" for the prototype already implies the existence of one or more 'secondary' nuclear senses, i.e. subcenters.

The radial set model thus offers an explanation for the motivatedness and dynamicity underlying the extended, i.e. non-central senses of a lexical item. Also, the integration of the concept of family resemblance makes it possible to "account for those categories in which the items no longer share any properties with the main prototype, but are nevertheless members of the category" (Rúa 2005: 169). Thus, Wittgenstein's notion of family resemblance (see Figure 2.1) which - as it is usually conceived – did not contain any central item that served as point of reference was developed into the the radial monocentric model, shown in Figure 2.2, with one element being the starting point for categorization, a model only applicable to clear-cut categories where strict categorization is possible. This, in turn was elaborated into the radial polycentric model by Lakoff, as demonstrated in Figure 2.3.

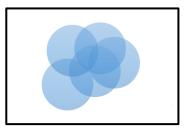


Figure 2.1 Family resemblance (after Rúa 2005: 93)

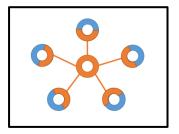


Figure 2.2 Radial monocentric structure (after Rúa 2005: 170)

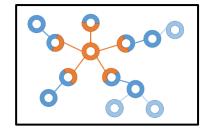


Figure 2.3 Radial polycentric structure (after Rúa 2005: 170)

A polysemic radial structure has, for example, been found in lexical concepts, such as 'truth', 'knowledge' and 'anger' (Lakoff & Kövecses 1987), linguistic constructions such as *there is* (Lakoff 1987), or grammatical cases (Janda 1990). In Lakoff's (1987: 463) vision, a grammar of a language that is founded on principles from a cognitive model theory "will be a radial category of *grammatical constructions* [author's italics], where each construction pairs a cognitive model [...] with corresponding aspects of linguistic form". In his opinion, all grammatical constructions in a language can be explained by a theoretical blend of prototype and radial structures (Lakoff 1987: 584).

#### 2.3.4 Schematic network model

The radial sets model was taken one step further in Langacker's schematic network model.<sup>24</sup> As Langacker (1987: 382) is convinced that the extraction of "schemas that embody the commonality of more specific structures" is a fundamental human ability, his model integrates "different levels of abstraction", one subsuming rather abstract schematic senses of a category, while the other comprises the more specific, more concrete subcases (Lewandowska-Tomaszczyk 2007: 154), as illustrated in Figure 2.4.

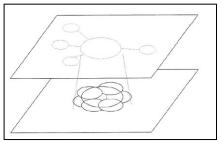


Figure 2.4 Schematic network (Lewandowska-Tomaszczyk 2007: 157)

Language users' ability to recognize "certain experiences as tokens of the same general type" is reflected in the model in the sense that highly specific, but in some way similar senses are grouped under an overarching schema at a more abstract level (Langacker 1987: 382). The perceived similarity between, for example, senses A and B "tends strongly to facilitate the establishment of C, the schema subsuming A and B" and subsequently "the establishment of C facilitates its use for communicative purposes, which in turn establishes its conventionality and further entrenches it" (Tuggy 2007: 87).

For example, the noun *can-opener* is "conventionally entrenched for millions of American English speakers. The sanction [it] receive[s] from" the even more abstract, and equally well-established schema [Object-Process-er] strengthens its status as a legitimate "part of the English language" (Tuggy 2007: 100). The same schema is then applied to sanction "not-yet-established" items such as *beetle-smasher* or *beetle-collector*, for the latter of which, "there is also direct sanction from the elaboratively closer schemas **Small.Item**-*collector* and (perhaps) **Insect**-*collector* [author's emphasis]", as well as "partial (indirect) sanction from *butterfly*-collector and (perhaps) *bug*-collector and others"; this renders the word *beetle-collector* "more strongly sanctioned than *beetle-smasher* would be" (ibid.), as illustrated in Figure 3.5. Thus, new

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<sup>&</sup>lt;sup>24</sup> Early applications of Langacker's network model are, for example, Rudzka-Ostyn (1989), Tuggy (1993), Taylor (1992), and Schulze (1993).

formations "do not sanction themselves, but the sanction they receive from the schemas qualifies them as acceptable English" (Tuggy 2007: 100).

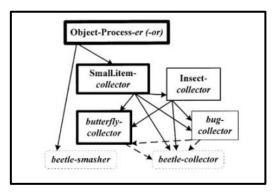


Figure 2.5 Sanction of established and novel structures (Tuggy 2007: 101)

Every communicative situation might activate a certain structure in the lexical network, and hence lead to its semantic expansion and modification, a process that explains the "dynamic, continual evolving nature of a complex category" (Langacker 1987: 376), and offers a solution for "the problem of diachronic change" (Tuggy 1993: 178).

As Langacker (1986: 3) has stated, language users' "knowledge of the conventional value of a lexical item cannot in general be reduced to a single structure, such as the category prototype or the highest-level schema." For this reason, the hierarchical structure of his network allows, albeit at different levels of granularity, the co-existence of abstract schemas and their more detailed elaborations, and, as such, can be seen as seeking a reconciliation between a radical monosemy and radical polysemy position (Lewandowska-Tomaszczyk 2007: 154), two types of analyses that "are not necessarily mutually exclusive but [...] can effectively complement one another" (Janssen 2003: 93).

### 2.3.5 Prepositional network approach

The theoretical device most extensively used in Cognitive Linguistics to represent the semantic range of a preposition is what Sandra and Rice (1995: 90) have called "the prepositional network approach", which may not be a unified theory<sup>25</sup>, but which extensively draws on insights and principles from prototype theory (see section 2.3.2), the radial set model (see section 2.3.3), and schematic networks (see section 2.3.4). The starting point of prepositional networks is certainly Brugman's (1981) seminal study of

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<sup>&</sup>lt;sup>25</sup> Sandra and Rice (1995: 94) critically commented that "there seem to be as many types of network models as there are networks modellers".

the rich polysemy exhibited by English *over*, whose semantics was hereafter explored by Lakoff (1987), Brugman and Lakoff (1988), Dewell (1994), Kreitzer (1997) and Tyler and Evans (2001, 2003). With her analysis, Brugman set off a chain reaction of studies, which came to be known as "the re-telling of the story of *over*" (Svorou 2007: 736).<sup>26</sup> Apart from the well-documented story of *over*, the prepositional semantic network has been applied to several other English prepositions (Schulze 1993; Tyler & Evans 2003), but also to other European languages, including French (Vandeloise 1991, 1994; Cuyckens 1993b), Dutch (Cuyckens 1991, 1993a; Geeraerts 1992; Beliën 2002), Polish (Bacz 1997; Dancygier 2000; Pawelec 2010), German (Bellavia 1996), Spanish (Delbecque 1996), and Norwegian (Kristoffersen 2001).

Based on the assumption that lexical items have a prototype structure, most of the prepositional lexical networks listed above, in general, feature the following setup: at the center of the network lies an allegedly central, i.e. prototypical, meaning of an item, around which all the other extended uses are organized in a systematic and motivated manner (Rice & Sandra 1995: 136). Each node is grounded on a certain relational configuration that differs from the adjacent ones with respect to one or two features. The relationship between the different nodes is usually structured by means of family-resemblance principles, that is to say, there is no common property to all members of the network and only some members are direct variants on the prototypical sense. The main mechanisms triggering the semantic extension, i.e. the extension from the prototypical sense to less central uses of a word, are said to be pragmatic inferencing and metaphor (Svorou 2007: 736), as well as image schemas and their transformations (Oakley 2007: 218). Taken together, these are considered the centerpieces of prepositional networks, "providing the cement between neighboring nodes" (Sandra & Rice 1995: 101).

Inferences made on the basis of contextual information and word knowledge shared by most members of a community play a key role in most communicative situations (Bybee 2007: 976). Bybee (2007: 976) states that, from a diachronic view, "clear cases exist" where the semantic structure of a grammaticalizing item was extended via pragmatic inferencing. One such clear case is, for example, the subordinator *since*, whose original meaning was temporal, i.e. 'from a past event until a later past event, or until now'. However, "events described in temporal relation often also have a causal relation, that is, the first event causes the second" as in *John has been very miserable since Susan* 

<sup>&</sup>lt;sup>26</sup> As a matter of fact, the re-telling of Tyler and Evans did not put an definitive end to the story of *over*, as the publication by Deane (2005) demonstrates.

left him, and because "causes" are normally of more interest to speakers and hearers than "pure temporal sequence", "a causal inference becomes conventionalized" by frequent use, as demonstrated by the sentence I'll have to go alone since you're not coming with me (Bybee 2007: 977). This type of inference, from temporal<sup>27</sup> to causal, also referred to as "the classical fallacy post hoc ergo propter hoc", is not just a characteristic of the English language, but has been detected in several genetically diverse languages, amongst others, in German, French and Finnish (Traugott & König 1991: 194-195), an observation which does not only point to its cultural independence but also to its "predictability" (Bybee 2007: 977).

Meaning extension through inferences derived from context is not a phenomenon pertaining solely to the process of grammaticalization, but is also "available for making online adjustments of meaning on the synchronic level" (Svorou 2007: 737). According to Panther and Thornburg (2007: 248), contextual implicatures can, through continued usage and eventual conceptual reanalysis, reach such a high degree of conventionalization that they "end up as senses in a polysemous word". A novel use arising in this manner is therefore seen as "motivated and non-arbitrary", yet the context that brought about this specific use may eventually become obscured and no longer recoverable by contemporary speakers so that, in spite of the principled polysemy underlying them, from a synchronic perspective, there appear to be "'messy', arbitrary elements" (Tyler & Evans 2003: 38).<sup>28</sup>

In view of this, it is not surprising that situated implicatures are regarded as crucially important in the process of expanding prepositional meaning. While traditional analyses assumed that a spatial scene in a sentence such as *The pen is on the table* is entirely constructed by the preposition (i.e., *in*), cognitive linguistic work has shown that the construal of a scene incorporates semantic contributions external to the textual level, i.e. contextual contributions (Svorou 2007: 737). Using terminology from Traugott (e.g., 1988: 413), Tyler and Evans (2003: 4), speak in such cases of *pragmatic strengthening*, which involves a shift "from traditional concrete and overt contexts to cognitive and covert context" that is concurrent with a change in the status of the implicature, i.e. from conversational to conventional (Traugott 1988: 411-412). The conventionalization of

<sup>27</sup> Traugott and König (1991: 195) note that the temporal meaning itself may be an extension of "an original spatial as in the case of consequently"

spatial, as in the case of *consequently*".

<sup>28</sup> An example of such synchronic messiness are the two meanings of the word *base* (Tyler & Evans 2003: 38): as a noun, it designates "one of the four 'stations' in a baseball diamond"; as an adjective, it means "morally or ignoble". Although from a diachronic perspective, these two meanings "are related", "synchronically, native speakers appear to treat them as unrelated homophones", as they are not aware of the historical connection between them.

frequently used implicatures originates either in "independently motivated experiential correlations (as with quantity and vertical elevation)" or in "construing a spatial scene [...] from a new vantage point" (Tyler & Evans 2001: 745).

The second mechanism presumed to drive and motivate meaning extension, that is, metaphor, has been an important research subject "within Cognitive Linguistics since the field was born and the term coined in the 1970s" (Grady 2007: 188). Leading figures in the study of metaphor are unambiguously the two cognitive linguists Lakoff and Johnson (1980). In their book *Metaphors we live by*, they adopt an approach which is in stark contrast to that applied by the autonomous generative paradigm, to which the notion of metaphor itself, as Taylor (2003: 132) somewhat drily comments, "has always been something of an embarrassment", since it violates selectional restrictions, allowing the combination of words made up of meaning components that were actually deemed incompatible.

Metaphorical extension makes use of an already existing image schema in order to come to come to grips with a novel situation (Svorou 2007: 740). For example, the relational domain of space is the original source for "semantic extension to domains such as time and causality" (Svorou 2007: 736). In fact, there is general agreement that the extension from a spatial domain to a temporal one is effected by the metaphor usually titled "TIME IS SPACE" (e.g., Lakoff & Johnson 1980; Lakoff 1987; Langacker 1987), for the existence of which ample diachronic (e.g., Traugott & Heine 1991) and typological (e.g., Haspelmath 1997) evidence has been found. Haspelmath (1997: 3), who analyzed the temporal uses of fifty languages, goes as far as to argue that the TIME IS SPACE metaphor is "universal".

The third structuring principle of polysemy networks is a combination of image schemas and image-schematic transformations (Lewandowska-Tomaszczyk 2007: 153; see also Oakley 2007: 218). The construal of a spatial scene as experienced by a conceptualizer (Svorou 2007: 734), makes extensive use of 'schematization', a process which refers to "the systematic selection of certain aspects of a referent scene to represent the whole, while disregarding the remaining aspects" (Talmy 2000: 765). These schemas, Johnson (1987: 29) argues, are the result of the speakers' "bodily movements through space, [their] manipulations of objects, and [their] perceptual interactions." As shown above, the classical componential analysis is generally rejected by cognitive linguists on the grounds of being cognitively unreal, i.e., "an arbitrary calculus"; instead, they opt for

an oriented cognitive topology, which characterizes structures oriented relative to the human body that apply generally to spatial situation, structures like paths, bounded regions, tops, etc. Structures in a cognitive topology differ from semantic features in a number of ways: they are inherently meaningful (arising from sensory-motor operations), they have an inherent structure, they are analog rather than finitary, and the relationships among them arise naturally via the operation of the human sensory-motor system. (Brugman & Lakoff 1988: 110-111)

In other words, frequent encounters from early infancy with certain spatial structures in the outside world lead to the formation of, and form the basis for, such image-schematic templates (Mandler 1992: 592), the most important of which are supposed to be the following (Johnson 1987: 126):<sup>29</sup>

CONTAINER; BALANCE; COMPULSION; BLOCKAGE; COUNTERFORCE; RESTRAINT REMOVAL; ENABLEMENT; ATTRACTION; MASS-COUNT; PATH; LINK; CENTER-PERIPHERY; CYCLE; NEAR-FAR; SCALE; PART-WHOLE; MERGING; SPLITTING; FULL-EMPTY; MATCHING; SUPERIMPOSITION; ITERATION; CONTACT; PROCESS; SURFACE; OBJECT; COLLECTION.

Complex conceptualization, however, does not only involve a mixture of the schemas listed above, but also their transformations (e.g., Johnson 1987: 25-27; Lakoff 1987: 440-444; Turner 1991: 177). Four major image-schema transformations have been identified by Lakoff (1987: 442-443), viz. path focus to end-point focus, multiplex to mass, trajectory, and superimposition, all of which are claimed to be "direct reflections of our experiences which may be visual, or kinesthetic"; it is, for example, "a common experience to follow the path of a moving object until it comes to rest, and then to focus on where it is", which matches up with Lakoff's path focus and end-point focus transformation. In other words, these transformations "are experientially grounded relationships between schemata" (Kreitzer 1997: 292).

Principles from image-schema theory have formed the basis for a number of investigations into polysemy (Oakley 2007: 219-223), yet early work in this field focused, in particular, on the question whether spatial terms, and the schemas on which they are presumably based, can be characterized with respect to geometric and topological properties (Bennett 1975; Miller & Johnson-Laird 1976; Herskovits 1982). On the other hand, functional properties of spatial scenes played merely a marginal and supportive role

Oakley (2007: 203) also agrees with Cienki on the point that some image schemas indeed seem to be "perceptually more primary (e.g., PATH), while other suggest a more complex structure".

<sup>&</sup>lt;sup>29</sup> It should be noted that "Johnson's authorative list" is not uncontroversial and raises questions relating to the granularity, the exact number, and the constraints of such image schemas (Oakley 2007: 229). Cienki (1997), for example, has postulated different levels of image schemas; he posits PATH to include more basic image schemas, which in turn subsumes more fully-specified subschemas such as STRAIGHT, SCALE, ITERATION, and CYCLE. Although in the literature they are generally not treated as hierarchically structured,

(Svorou 2007: 734),<sup>30</sup> thus reducing the conceptualizer to the relatively passive part of "perceivers", not taking into account their active role in events, that is, as "users of objects and experiencers" (Svorou 2007: 734). Yet, functional concepts significantly gained in importance in later accounts: for example, it has been argued that the functional notions of 'containment', 'support' (Vandeloise 1986), and 'force' (Vandeloise 1994) might best account for the lexical structure of French prepositions. The importance of functional categories in the conceptualization of spatial scenes, in particular the two concepts of 'containment' and 'support', is also underpinned by empirical research conducted by Coventry, Carmichael & Garrod (1994), and Garrod, Ferrier and Campbel (1999), who studied the semantics of English *in*, *on*, *over* and *beside*.

In how far topological properties of entities participating in an event should be taken into account in the analysis of prepositional meaning – in short, the degree of specificity of analysis – has been an issue of much heated discussion (e.g., Sandra & Rice 1995: 5; Vandeloise 1990: 433; Cuyckens, Sandra & Rice 1999: 58). Lewandowska-Tomaszczyk (2007: 152) notes that it is actually "the question of the granularity of definition" that decides whether an analysis is to be based on an approach favoring a homonymic, monosemic or polysemic view on lexical meaning. As argued above, supporters of homonymy deny any motivated relationship between a word's multiple senses, the monosemic position opts for a maximally schematized semantic analysis, while the polysemy stand has, so far, favored more "fine-grained, maximally specific analyses".

Indeed, "the extremely fine-grained structure" of prepositional networks has been viewed as its most defining feature (Sandra & Rice 1995: 91). Initial cognitive-semantic studies of prepositional polysemy (Lakoff 1987: 422; see also Brugman 1981; Lindner 1981) chose a "full specification" analysis, which gives careful consideration to geometrical aspects of the trajector (TR), the profiled entity to be placed, and the landmark (LM), the entity in the background with reference to which the trajector is to be located. Lakoff (1987: 420), for instance, claims that clear differences in the dimensionality of the LM give rise to two distinct senses: so following his line of argumentation, it does matter whether the TR (e.g., a *bird*) moves over a *hill*, i.e., an extended LM, or a *wall*, i.e., a vertical LM. This kind of analytic mode, which takes even

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<sup>&</sup>lt;sup>30</sup> Miller and Johnson-Laird (1976) suggested 'region' and 'support', the latter also being proposed by Herskovits (1986).

<sup>&</sup>lt;sup>31</sup> In the following the terms landmark (LM) and trajectory (TR) will be used, as first advocated by Langacker (1987). They are to be seen as spatial concepts analogous to Talmy's (1975) Gestalt-psychological notions of "Figure" and "Ground", respectively.

the smallest geometrical differences into consideration, ultimately leads to an inflation of possible usage specifications, all of which claim representational status in the network (Tyler & Evans 2001: 727). Furthermore, if the meanings of an item are continuously proliferated, the question arises, when to put an end to the seemingly endless increase in polysemic items, bearing in mind that "no two tokens of a word will refer to *exactly* same situation", that "there will always be *some* difference between two uses of the same word" (Taylor 2003: 147)?

Beside the "so-called 'rampant' polysemy" (Cuyckens & Zawada 2001: xvii) or "polysemy inflation" (Herweg 1988: 106), such fine-grained analyses have three serious shortcomings. First of all, its methodology is seemingly unconstrained (Tyler & Evans 2001: 727). In adopting a full-specification approach, which, as shown above, assumes that even the smallest differences in the spatial properties, or the dimensionality, of the TR and the LM activate different schematizations, there are "a vast number of distinct senses explicitly specified in the semantic network" (ibid.). As a result, it becomes exceedingly diffult to clearly delineate them from senses coded by other prepositions. Kreitzer (1997: 292) notes that even semantically completely unrelated prepositions, such as through "can be related to the polysemy network of over". Second, the Lakoffian model is accused of completely disregarding situated knowledge and the world knowledge language speakers possess (e.g., Tyler & Evans 2001: 727). It also pays little attention to other elements in the sentence and their semantic contributions to the overall interpretation of an event, and neglects the fact "that detailed properties of LMs and TRs" can often not be inferred from the lexical items used by speakers (Tyler & Evans 2001: 727). Little meaning differences might better be attributed "to the meanings of surrounding words, in association with general conceptual knowledge of how the world works" and, consequently, "need not be enshrined in the mental lexicon as distinct polysemes" (Taylor 2006: 55).

The long-running, fierce debate revolving around the English preposition *over* - now probably "one of the most well-studied words in recent history" (Kreitzer 1997: 295) - has also exposed the main flaw of the polysemy network model in general: its lack of a "clear-cut methodology" (Sandra & Rice 1995: 90). More specifically, it is in urgent need of specific criteria by which to determine distinct senses (Cuyckens, Sandra & Rice 1999: 58). Dewell (1994: 353), by example, admitted that when choosing "the 'semicircular path'" as the central schema of *over*, he merely used his intuition, a modus operandi that

is particularly prone to criticism.<sup>32</sup> In fact, the large majority of prepositional network modelers has primarily relied on their "particular analytic skill or subjective aesthetic" than on objective criteria and principles formulated in advance (Rice 1996: 137-138). Against this backdrop, different researchers are practically bound to distinguish between the meanings of a preposition on different grounds and, accordingly, put forward different network models (Sandra & Rice 1995: 92).

While the degree of fine-grainedness, as well as schematization, of network analyses may still be a matter of controversy among cognitive linguists, "[w]hat is generally held argued for, on the theoretical level [...] and shown on the experimental level [...] is the validity of a polysemic approach to the representation" of prepositions (Svorou 2007: 736). For this reason, the polysemy network approach to prepositional semantics has not been abandoned and has not experienced a marked decline in popularity. However, its inherent methodological weaknesses have been tackled by Tyler and Evans (2001, 2003). Advocating their 'principled polysemy' model, they are the first to suggest a set of principles and criteria in order to systematically approach the polysemous nature of spatial particles (see section 3.2), but even though their polysemy framework has unquestionably laid some much-needed theoretical groundwork for future analyses of prepositional meaning, it continues to be restricted in two significant ways. First, their study is predominantly synchronic, whereas diachronic data is, in essence, relegated to the selection of the sense serving as the protoscene (Tyler & Evans 2003: 3-4). Second, as the greater part of previous analyses, they concentrate on data from one single language. However, it has been put forward that "[t]he presence of elements of synchrony in diachrony and diachrony in synchrony" does call for "historical linguistic methodology in cognitive linguistic analyses [author's italics]", which can further be complemented "cross-language comparisons and variationist studies [author's italics]" (Lewandowska-Tomaszczyk 2007: 159).

That the current polysemy network of a preposition might be a reflection of its diachronic evolution has been pointed out by several researchers (e.g., Geeraerts 1997: 6; Sweetser 1990: 3; Sandra & Rice 1995: 104; Zlatev 2007: 342), a claim which is also supported by the observation that "the synchronic links that exist between the various senses of an item coincide with diachronic mechanisms of semantic extension" (Geeraerts 1997: 6). Moreover, Geeraerts (1985: 148) has shown that, on the whole, prototype

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<sup>&</sup>lt;sup>32</sup> Kreitzer (1997: 296) has, for example, accused Vandeloise of basing his account of the spatial uses of *over* on "false intuitions".

theory, of which such lexical networks make extensive use, offers an adequate description of "the diachronic semantic structure of items" and that this correlation can be taken as "reflect[ing] deep-seated properties of human cognition". Brown and Witkowski (1938: 83) also believe that close scrutiny of "patterns of [lexical] change" may help in identifying "the process and capacities which underlie human language and culture". In order to pinpoint the true "nature of the extension principle(s)", it might be necessary to study the semantic structure of a lexical unit from a diachronic perspective, i.e. to "chart its evolution" (Sandra & Rice 1995: 101).

Historical studies of prepositional meaning thus may demonstrate that regular patterns detected in "linguistic change, lexical shift and expansion" may be the result of "cognitive principles in the mind" of speakers, with the caveat that these do not automatically "have any psychological reality in the minds of contemporary speakers" (Cuyckens, Sandra & Rice 1999: 70), as has been implicitly suggested by previous prepositional analyses. <sup>33</sup> It has been argued that without relevant data and results obtained from psycholinguistic experiments, such network analyses should be seen as completely "neutral with respect to issues of mental representation" (Cuyckens, Sandra & Rice 1999: 58). This also means that the sense postulated as central "does not have the same psychological status as the prototype representation of a monosemous category like BIRD", for example (Taylor 2003: 119). The historical relatedness between meanings associated with a single lexical item does not necessitate "synchronic derivational relations [...] or that the source form must still be in use" (Lichtenberk 1991: 476).

In brief, although mental representations are out of reach for linguists, they may be successful in shedding some light on "the mental principles that determine the nature of human languages" (Sandra 1998: 361). In addition, De Mulder and Vanderheyen (2002: 6), who based their investigation of French *sur* on the diachronic prototype semantic approach, as proposed by Geeraerts (1997), have shown that studying the diachronic evolution of a preposition can help in determining which specific usage types should be incorporated in the lexical network. Such an analysis might offer a possible answer to the question posed by Rice (1996: 142) and others, namely, "[h]ow many distinct elements are there in the network?"

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<sup>&</sup>lt;sup>33</sup> Some "cognitive-psychological overtones" can (Sandra & Rice 1995: 90), for example, be traced in Lakoff and Brugman (1986: 451): the family-resemblance structure of their network for *over* is hypothesized to represent the "synchronic connections in the semantic knowledge of the user".

The question of the density of network population might partly also be answered by cross-linguistic comparisons. Contrasting prepositions against their semantic equivalents in other languages might prove helpful in determining their distinct meanings (Haspelmath 2003: 215; Croft 2001: 226; Haiman 1974: 341). Cuyckens, Sandra and Rice (1999: 70) further believe that the same operating principles observed in one language under examination "must be in evidence in a broad range of linguistically diverse languages"; otherwise, "the very cognitive basis of cognitive linguistics" could be seriously called into question. Svorou (1994: 64) likewise assumes that there might be close similarity between different languages as to how they express spatial relations; the detection of "[s]imilar lexical sources and paths of evolution of spatial grams across languages" leads her to the conclusion that there might be "universal principles" which regulate "the linguistic encoding of spatial relations", but despite first promising insights provided by Brenda (2014), Kristoffersen (2001) and Vandeloise (1994), cross-linguistic research into the semantic structure of prepositions is still in its infancy.

In conclusion, the principled polysemy approach to the rich polysemy of prepositions, as advocated by Tyler and Evans (2001, 2003), forms a sound theoretical foundation for future analyses. The present thesis, however, wants to take their model one step further, and expand the limited view of synchronic networks that draws almost exclusively on introspective data from one single language: it aims at breaking free from the limitations of an introspective analysis, and at moving towards a more empirical lexical semantics. It will do so by basing the account of English *about* and *around*, first and foremost, on data from the Corpus of Contemporary American English (COCA) and Corpus of Historical American English (COHA). Further, the analysis takes a diachronic perspective, considering samples from the Old English period to the present, with the aim to map out the evolutional path of these prepositions, and finally, it integrates crosslinguistic comparison (English-German) in the process of delineating distinct senses from just contextual elaborations.

We think because we have words, not the other way around. The more words we have, the better able we are to think conceptually.

— Madeleine L'Engle

# 3 Analysis of English about and around

#### 3.1 Data

Although the use of corpora "was present in Cognitive Linguistics from its inception onward", "the methodological position [...] vis-à-vis corpus research [...] seems to be characterized by a certain amount of reluctance" (Grondelaers, Geeraerts & Speelman 2007: 149).<sup>34</sup> Cognitive linguists' apparent lack of enthusiasm for empirical methods in general has been pointedly described by Gibbs (2007: 3) as follows:

Despite the differences with generative linguists, cognitive linguists mostly employ traditional linguistic methods of examining native speakers' intuitions about the grammaticality and meaningfulness of linguistic expressions in order to uncover idealized speaker/hearer linguistic knowledge. In most cases, the linguistic expressions examined are **made-up** (i.e., not derived from actual spoken and written discourse), and the intuitions studied are those of the scholar conducting the work [emphasis added].

As a psychologist and psycholinguist, Gibbs (2007: 3) has a healthy skepticism towards a heavy reliance on introspection, but he, at the same time, acknowledges that "many of [his] own experimental studies [...] suggest that cognitive linguistic conclusions about the nature of human conceptual systems may indeed be correct and thus psychologically real".

"[C]ognitive linguists need not do experiments", as Gibbs (2007: 16) phrased it, but they could show greater concern for empirical methods, a suggestion that the present analysis attempts to act on. In lieu of made-up sentences, the samples under investigation are all derived from large monolingual corpora. Since investigating the use of *about* and *around* in different varieties in English is beyond the scope of this thesis, the focus lies almost exclusively on American English. For this reason, the examples examined and referred to throughout the sections are, for the greatest part, taken from the following two corpora: the *Corpus of Contemporary American English* (Davies 2008-) and the *Corpus of Historical American English* (Davies 2010-). Occasionally, the sentences analyzed are drawn from the *American Google books corpus* (Davies 2011-), and the *Oxford English Dictionary* (OED); the latter is a particularly important source for Old English and Middle

<sup>34</sup> For some corpus-based investigations using a cognitive linguistics framework, see, for example, Gries (2003), Stefanowitsch and Gries (2003), as well as Speelman, Grondelaers and Geeraerts (2003).

English uses of *about* and *around*. German examples come from the corpus Die Zeit (ZEIT), which contains all digitally published *Die Zeit* issues from 1946 onwards; it is a freely-available corpus of German provided by *Das Digitale Wörterbuch der deutschen Sprache* (DWDS), a project funded by The Berlin-Brandenburg Academy of Sciences and Humanities.

While in his analysis of American English *around*, Dewell (2007) discusses only invented sentences, as most previous cognitive linguistic prepositional studies (e.g., Brugman 1981, Lakoff 1987, Brugman & Lakoff 1988; Tyler & Evans 2001, 2003), Schulze's (1993) earlier discussion of the same preposition in British English provides examples from three types of corpora: the Collins Cobuild English language dictionary (COBUILD), the Oxford dictionary of current idiomatic English (ODCIE), and the Lancaster-Oslo/Bergen corpus (LOB), all of which are relatively small in direct comparison with the COCA or COHA, which contain 520 million and 400 million words of text, respectively. The LOB, for example, is composed of merely 1 million words in texts, all of which were published in 1981; the COHA, by contrast, covers a significantly wider time period, comprising data from the 1810s to 2000s.

While corpora of smaller size, such as the LOB, have been successfully used in analyses concerned with "high frequency syntactic constructions such as auxiliaries, modals, relative pronouns or prepositions", as pointed out by Mark Davies (2012: 162), they also have an undeniable weakness:

[S]mall corpora may at times limit us to looking primarily at high frequency constructions in the middle of their life cycle (or toward the end of the cycle, for high frequency forms). Large corpora, on the other hand, allow us to look at high, medium, and low frequency phenomena, in all stages of the "life cycle" of a linguistic change (Davies 2012: 163).

Unsurprisingly, the large size of the COHA has been highly beneficial in the analysis of a number of *about's* meanings which either appear in the COCA extremely rarely or do not occur at all, but for which several tokens can be found in the COHA. This proved of considerable help in revealing that the semantic path followed by the two English prepositions *about* and *around* has been more similar than might have originally been expected.

## 3.2 Methodology

In the present thesis, *about* and *around* will be analyzed as members of different word classes. In the practice of traditional grammar, the classification of a lexical item, i.e. its assignment to a particular syntactic class, is mostly carried out according to certain syntactic properties it shares with other members of that class. The category of prepositions, for example, is claimed to form a syntactic unit with the following complements: noun phrases, *wh*-clauses, *ing*-clauses or other prepositional phrases (Quirk et al. 1985). However, since the analysis conducted here aims at the concepts that lie behind language and language use, it takes, above all, a semantic perspective, "by equating meaning with conceptualization (or cognitive processing)" (Langacker 1990: 29-30), including lexical as well as grammatical meaning.

Moreover, differences in grammatical form could be seen as "reflections of semantic and functional shifts" (Schulze 1993: 401; see also Wierzbicka 1988: 14). Allowing that "syntax is meaningful, in principle in the same way as lexical items, it follows that differences in syntactic form reflect a distinction in meaning" (Tyler & Evans 2003: 61). Therefore, in line with previous network analyses of prepositional meaning (e.g., Brugman 1981, Lakoff 1987, Brugman & Lakoff 1988, Schulze 1993; Tyler & Evans 2001, 2003), the discussion of *about* and *around* is not restricted to strictly prepositional uses (e.g., *It was around the tree*), but also encompasses what in the literature are often referred to as phrasal verb particles, (e.g., *What has brought about this change?*), adverbial (e.g., *They were sitting around*) and adjectival uses (e.g., *Nobody else is around*).

All of these allegedly different uses will be treated as prepositions,<sup>35</sup> as has recently been suggested by a number of linguists (e.g., Keizer 2009; Aarts 2001). Apart from the resulting "economy of description [author's italics]", which should be a key factor in any decision "between two or more competing analyses of some phenomenon" (Aarts 2001: 174), such a treatment offers several advantages, as pointed out by Keizer (2009: 1187):

[B]y regarding these elements as prepositions, there is no need to resort to the term particle, which has been used to cover a rather ill-defined collection of elements which seem to have little in common (pragmatically, semantically or syntactically). Nor does the term adverb seem very appropriate, as the elements in question share none of the distinctive features of adverbs in any of their uses.

<sup>&</sup>lt;sup>35</sup> Quirk et al. (1985: 658) also admit that "[t]here are several points of similarity between prepositions and other word classes and constructions in English grammar, in particular conjunctions and adverbs, but also participles and adjectives." Because of this considerable overlap, Jackendoff (1973) once proposed the idea that prepositions, adverbials, particles and even conjunctions form one category, a hypothesis that has received further support from the results of the present analysis.

Regarding them as prepositions, however, has the further advantage of being able to make an important generalization, in the sense that each of the main types of predicates (verbal, nominal, adjectival and prepositional) can be said to have a transitive and an intransitive use [...].

Thus, in analogy to the distinction between transitive (e.g., *Jane is eating an apple*) and intransitive verbs (e.g., *Jane is eating*), prepositions which take a complement as *in* in *Peter is in the house* are used transitively, whereas prepositions without a complement as *in* in *Peter is in* are used intransitively.

Furthermore, all instances of prepositions retrieved from the corpora listed above will be analyzed according to the methodological principles, as put forward by Tyler and Evans (2001, 2003); modifications to their model will only be made, if deemed necessary. Following Langacker (1987: 157), Tyler and Evans (2001: 734) suggest a set of criteria for determining the primary sense of a preposition, none of which is "criterial", but helps to "narrow down the arbitrariness" of this process:

- (1) earliest attested meaning
- (2) predominance in the semantic network
- (3) relations to other prepositions
- (4) grammatical predictions

Since the semantics of prepositions will be investigated from a diachronic perspective, criterion (1) will be used for determining the spatial configuration of the protoscene, the starting point of *about* and *around*, from which all the other senses spread in a principled way. Each meaning identified as a distinct sense for *about* will be discussed in relation to the preposition *around* and, at times, to other English prepositions (e.g., *at* or *to*), which meets criterion (3). Further, the criterion of grammatical prediction (4) will not only be applied to direct variants of the protoscene, but, where possible, to all extensions in the semantic network. Any sense should be derivable from a particular interpretation of an already existing sense "whose context provide[d] the implicature" that has eventually led to its formation (Tyler & Evans 2003: 49).

However, criterion (2) is merely secondary to the present analysis. The notion of predominance might be true for very new prepositions, which are not highly grammaticalized and in which "the earliest attested sense" might still be "a major, active component of the synchronic semantic network", as argued by Tyler and Evans (2001: 734). This is, however, increasingly unlikely for rather old prepositions of a high level of grammaticalization; the spatial configuration serving as the protoscene, as the springboard for all other senses to come, might still be the predominant sense for

contemporary senses, but it does not have to. It is also possible or even to be expected that the notion of predominance might have shifted to a different sense, i.e. an extension which has been developed at a later stage in the semantic development of the preposition.

For establishing whether a specific use of a preposition is to be treated as a distinct sense and hence granted representation in the lexical network of *about* or *around*, the following two criteria have been applied (Tyler & Evans 2001: 731-732):

- (1) Assuming that the primary meaning of a preposition is spatial, an extension must be either "not purely spatial in nature", i.e. a non-spatial meaning is added to the interpretation, "and/or [...] the spatial configuration between the TR and LM" differs from those profiled by other senses expressed by the preposition.
- (2) There must be readings of the meanings which cannot be easily deduced from the context and other senses.

These two criteria will be complemented by data from language comparison. The sentences which seemingly illustrate a specific sense of *about* or *around* will be contrasted against semantically comparable German sentences. For example, two assumedly distinct senses of *around*, which fulfill Tyler and Evan's criteria, receive additional support for their status as two polysemes of *around*, if they are coded by two different linguistic expressions in the German language.

### 3.3 Why about and around?

In contrast to the English preposition *over* or English monosyllabic prepositions such as *in*, *on*, or *at*, the prepositions *about* and *around* have thus far not been heavily investigated. Accounts adopting descriptivist approaches are, for example, provided by Bennett (1975) and Lindkvist (1976), but for the reasons outlined in section 2.1, they do not aim at offering explanations of the semantic structure of *about* and *around*. Within the cognitive linguistics domain, the former has received only scarce attention, while the latter has been analyzed in some more detail: Hawkins (1985), for example, looked at the spatial uses of *around*, an analysis which has been extended by Schulze (1991, 1993), who also included the abstract senses in his discussion of British *(a)round*. Both of them adopted Langacker's schematic network model (see section 2.3.4), which contains two different levels of abstraction, with the more abstract uses being instantiated by a subset of more specific usage types, i.e. elaborations of the schemas at the higher level of the

network. Recently, Dewell (2007) has presented a survey of the senses encoded by (a)round, as used in American English. Lindstromberg (1998; 2010) tries to account for the different image schemas underlying the different senses of both about and around, but like Dewell (2007), provides only few satisfactory explanations of their systematic interrelatedness. However, to my present knowledge, he is the only researcher to date who examined some of about's contemporary meanings, using a cognitive linguistics perspective, a gap which the present analysis attempts to address and close.

Semantic equivalents in other languages have likewise not been dealt with extensively: studies such as Wunderlich's (1993), an account that primarily explored the spatial meanings associated with the German preposition *um* 'around' in some detail and was partly applied to English *around* by Taylor (2003: 154), present still an exception.

Yet an in-depth analysis of both *about* and *around* seems a worthwhile endeavor for two compelling reasons: compared to monosyllabic, i.e. highly grammaticalized, primary prepositions, English *about* and *around* have a fairly restricted usage range. Specifically for *around*, which dates back only about 400 years, "there has been insufficient time [...] to develop the variety of distinct senses and usages of an ancient preposition" (Lindstromberg 2010: 133). Thus, being polysyllabic secondary prepositions, they could provide a better insight into the evolution of their different senses (Lehmann 2002: 85). Furthermore, the shorter a lexical item becomes with regard to its form, the more frequent it tends to be (Bybee, Perkins & Pagliuca 1994: 20); conversely, items of lower grammaticality status such as *about* and *around* generally have a lower level of frequency, a fact which aids a corpus-based analysis, given that a smaller set of data makes it considerably easier to identify similarities and various relationships between the numerous meanings (once) associated with them.

The second major reason for studying *about* and *around* is that in contemporary English both of them are sometimes used to code for almost the same meanings: for example, to express approximation as in (1a) and (1b), or aimless motion as in (2a) and (2b):

- (1) a. Domestic fares are down but just barely about two dollars. (COCA)
  - b. I got this for **around** two hundred dollars. (COCA)
- (2) a. I knew I should hurry **about** the house and secure the storm shutters. (COCA)
  - b. He took her **around** the house, and she admired all the rooms with their rag rugs, woven baskets, [....]. (COCA)

This synchronic variation might result from the fact that both *about* and *around* go back to the same spatial configuration as their primary source. Although in contemporary English, *about* is primarily associated with abstract and figurative meanings such as 'on the subject of' or 'concerning', it was once used to code for spatial senses which have partly fallen into disuse (Lindstromberg 2010: 60), but are remarkably similar to the ones *around* codes for nowadays. As a consequence, it could be assumed that the two have probably gone through strikingly comparable semantic paths. Since the newer preposition *around* seems to undergo semantic changes, as *about* once did, it might be possible, at least to a limited extent, to predict its future path, but also of other prepositions in other languages, providing that they go back to a sense which was grounded on the same spatial configuration. On the other hand, a comparison of *about* and *around* might help in determining which contemporary senses of *about* can be considered older senses, bearing some traces of the initial spatial usages and correlating with the senses *around* is associated with nowadays, and which are later, more abstract extensions, already semantically remote from spatial concepts.

### 3.4 The stories of about and around

## 3.4.1 Historical source and protoscene

The preposition *about* was already used in the Old English period, when it gradually encroached upon, and eventually replaced, OE *ymb* 'around, in the neighborhood of', which is the ancestor of the German preposition *um* (DWDS). The contemporary form of *about* derives from OE *abutan*, earlier *onbutan*, which is composed of the prefix *on* 'on', the preposition *by* 'alongside', and *outan* 'outside of' (Hoad 1996). The OED relates its earliest attested meaning to a spatial configuration in which the TR is located 'round the outside of' the LM, which most likely has led to the entrenchment of a circular image schema. Irrespective of the size or dimensionality of the entity which serves as the LM, once the TR is construed as being located along its outside edges, the resulting mental image by abstraction is a circle. By contrast, the preposition *around* is relatively new and only came into use during the Middle English period, around the 14<sup>th</sup> century, but was not frequent before the end of the 16<sup>th</sup> century (OED); it was derived by attaching the OE prefix *a*- 'on, on to' – no longer productive in contemporary English – to the noun *round*, which denoted a 'circular band' or 'ring-shaped object', and goes back to the Latin

adjective *rotundus*; this in turn stems from the noun *rota* meaning 'wheel', i.e. a circular object.

Using terminology from Tyler and Evans (2001: 735; 2003: 50), the primary sense from which all the later senses have assumedly evolved, will be referred to as the 'protoscene'. It is grounded on a spatial configuration that represents the very **first** stage in the historical evolution of *about* and *around*, <sup>36</sup> with the important difference that it does not lay claim to be the meaning that contemporary speakers of American English view as the most representative of the prepositions in question, or as being prevalent in most of the senses in the network.

As a starting point for establishing the spatial configuration of the protoscene serves the criterion of 'earliest attested meaning'. According to the OED, the locative sense of *about* shown in (3), with the meaning 'on every side of' and 'all round', is the only one that extends back to the **Early** Old English period (c. 650 to 900). It was still in use during the Middle English period, as the line from Chaucer's *The General Prologue* in (4) shows, but in contemporary English it is on the verge of disappearance. Sentence (5), the latest example in the COHA in which the verb *tie* collocates with *about* - as opposed to today's common collocation *to tie sth around sth* - is taken from a text composed nearly three decades ago.

- (3) [...] se here sceolde bion getrymed **onbutan** Hierusalem. (OED) '... the troops may be arranged around Jerusalem.'
- (4) Of smal Coral **aboute** hir arm she bar A peyre of bedes. (OED) 'Around her arm, she bore a set of beads of small coral.'
- (5) The yellow ribbon tied **about** the maple in my parent's front yard has long since bleached white as bone. (COHA)

Except for Scottish English, *about* ceased to be the preferred preposition for expressing this type of meaning (Lindstromberg 1997: 132, 2010: 133). In the following, it will be shown that *about* was once "used to refer to most of the spatial arrangements" coded for by the relatively recent preposition *around*, but is most likely gradually substituted by the latter, "since newness tends to go hand in hand with greater imagistic detail, which in turn" has greater "appeal to people who are speaking colloquially" (Lindstromberg 2010: 140). Bolinger (1971: 62-63) likewise noted that "the phrasal verbs based on *about*" have an air of "formality and quaintness" about them, especially in American English. The

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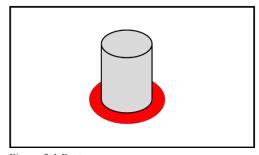
<sup>&</sup>lt;sup>36</sup> This understanding of the term seems closely comparable to what Vandeloise (2006: 151) has labeled 'impetus'.

remaining, faintly spatial senses of *about* are generally regarded to be more formal than their modern counterparts with *around* (Quirk et al. 1985: 681).

Interestingly, the earliest attested meaning of the newer preposition *around* was actually the same as that of *about*; as a preposition of place, it appeared on the stage more than four centuries later than *about*, initially coding for literal 'surrounding' in Middle English (OED). Yet compared to *about*, which has almost completely lost this meaning – at least in North American English –, *around* remains the first choice for this kind of meaning nowadays, as seen in (6). In contemporary German, it is usually expressed by the preposition *um*, as illustrated in (7); given that German *um* is cognate with OE *ymb*, which in combination with the accusative case was associated with the locative 'around' sense seen in (8), the circle schema must have represented a relatively early stage in *um's* semantic development as well.

- (6) His gaze went to the gold necklace around her neck. (COCA)
- (7) Sie haben gegelte Haare, Kettchen **um** den Hals, sie lachen, hören Musik, zeigen sich Fotos. (ZEIT)
- (8) **Ymbe** ða dúne 'circum montem' (Ælfc. Gr. 47) 'around the mountain'

On the assumption that the earliest meaning of a preposition corresponds to the protoscene, then the image schema on which the earliest meanings of *about* and *around* are based are derived from this locative sense illustrated above<sup>37</sup>, and might have been akin to the drawing in Figure 3.1; Figure 3.2 depicts the same TR-LM configuration from a top-down perspective.<sup>38</sup>



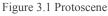


Figure 3.2 Protoscene – top-down perspective

<sup>&</sup>lt;sup>37</sup> In positing the locative sense as the original sense, the present analysis deviates notably from those of Schulze (1993: 404) and Dewell (2007: 284), who both regard circular motion around the LM to be the most central, i.e. primary, sense of *around*. For Schulze (1993: 404), "movement of F [= Figure] (a)round G [= Ground] is of prime importance."

<sup>&</sup>lt;sup>38</sup> In the diagrams used throughout this thesis to visually illustrate the schemas underlying the meanings discussed, the red entity represents the TR, whereas the dark grey entity stands for the LM. The notion of movement is rendered via red arrows.

The protoscene designates a stative spatial relation where the TR is on all sides of the LM, which invokes the form of a circle, a TR-LM configuration that marks the beginning stage of both *about* and *around*, from which the new uses have developed, even though in the case of the former, it has become virtually obsolete in contemporary American English. Thus, the present analysis is fully compatible with Langacker's claim (1987) that lexical networks are not atemporal, but as language itself, subject to change: on the one hand, they are continuously growing, that is, novel uses appear "at the periphery" (Rice 1996: 142); on the other hand, they also show signs of decay, that is, some senses eventually disappear.

The schematic structure of the protoscene might have also been the initial trigger for an abstract use once associated with *about* and now coded for by *around*, i.e. a meaning in which the adjustment of the TR to the LM is prevalent. As is evident from (5) and (6), the protoscene of *about* and *around* requires that the TR conforms to the LM's contours, i.e. that it molds itself to it. So, if an entity with linear extension is located around an LM, the former adapts its shape to the latter. The spatial configuration "does not necessarily imply that the extended TR ever actually" moved along a circular path "to reach its final position [...]. All that matters is that a scan of its shape conforms to an *around* path" (Dewell 2007: 386). This notion of spatial 'adjustment' might, with time, have been extended to mental adjustment as illustrated in the sentences (9) to (11).

- (9) It is apparent, by now, that first-generation immediatists organized their everyday lives **about** small unstructured sanctuaries such as the three we have examined. (Friedman 1982: 129)
- (10) Rural residents still organized their lives **around** the twin posts of family and farm. (COCA)
- (11) Sie machen die Regeln, können sich alles erlauben. Männer müssen ihnen gefallen und sie gleichzeitig fürchten, und ihr Leben **um** sie herum organisieren (ZEIT)

The TRs of (9), (10) and (11) are organized in such a way that they are compatible with their respective LMs. Put another way, the sanctuaries in (9), the family and farm in (10) and the women in (11) have a powerful impact on how the subject referents live their lives. Changes in the LM demand adjusting changes in the TR in order to retain compatibility.

## 3.4.2 Beyond the protoscene: additional senses

The proposed polysemy network for *about* comprising sixteen distinct senses, including the protoscene, is illustrated in Figure 3.3. Taken together, they form a radial category, but unlike in the graphic representation of previous networks, the protoscene is not given central position in the middle of the network, as it is not presumed to be the prototypical sense for contemporary speakers; instead, it is placed above all the other senses to reflect the diachronic development. Each sense is represented by a sphere: meanings that are no longer or rarely used in Modern English are portrayed by grey spheres, and comtemporary usages by black ones. The arrows indicate the process of semantic extension.

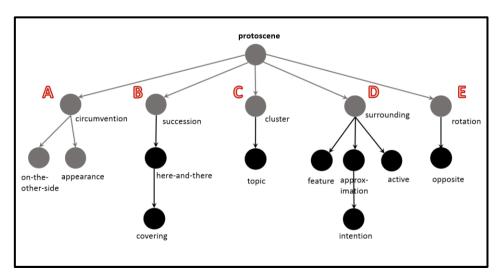


Figure 3.3 Semantic network for about

The schema of the protoscene is seen as the primary source for the following five senses, all of which already developed during the Old English period: the 'circumvention' sense, the 'succession' sense, the 'cluster' sense, the 'surrounding' sense and the 'rotation' sense. Each of these five branches of the semantic network becomes a secondary conceptual center whose schematic structure leads to the development of, and forms the base for, a number of novel senses that, accordingly, are not direct variants of the protoscene. In other words, assuming that "any node in a meaning chain can be the source of any number of meaning extensions" (Taylor 2003: 111; see also Brugman & Lakoff 1988: 109; Tyler & Evans 2001: 746), they have evolved as perceptual variations of another derived form. Thus, following several previous prepositional network modelers (e.g. Brugman 1981; Lakoff 1987; Kristoffersen 2001; Tyler & Evans 2001), the relationship shared by the members of the network is grounded on Wittgenstein's principles of family resemblance (see section 2.3.2), whereas the relations between them should be perceived as image-schematic transformations (see section 2.3.5).

A comparison of the network for *about* with the network for *around*, which consists of fifteen senses in total (see Figure 3.4), reveals that they are strikingly similar – or better, nearly the same. Apart from one sense, i.e. the 'intention' sense, *around* can, to varying degrees, express all the meanings that *about* codes for or once used to code for. Surely, the 'topic' sense and the 'feature' sense are not well-established in contemporary English, but there are first signs that they may be developing; both of them are therefore depicted as blue spheres in Figure 3.4.

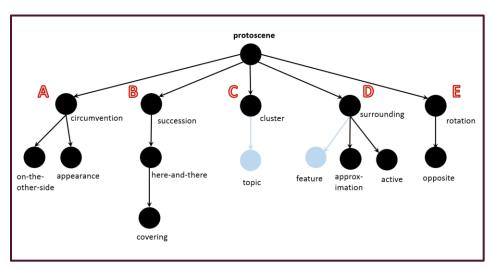


Figure 3.4 Semantic network for around

The 'topic' and 'feature' sense of *around* are not emerging as extensions from the protoscene, but are to be found at the outer edges of the network, which is in accordance with Langacker's (1987) and Rice's (1996) dynamic network architectures that are affected by time. Conversely, the senses of *about* that have long become out of use and rarely occur in contemporary English are to be found near the protoscene. Additionally, *around's* meanings of 'topic' and 'feature' also support Rice's (1996: 142) claim that "fairly novel usages [...] are usually pretty abstract".

Due to the substantial overlap between *about* and *around* with regard to the evolution of their senses, and in order to avoid unnecessary repetition in arguments, the two prepositions will not be dealt with separately, but simultaneously. The two figures above also serve as the structuring principle and basic outline of the remainder of the thesis. The clusters will be discussed in turn, moving from the left, i.e. Cluster A, to the right, i.e. Cluster E.

### 3.4.3 Cluster A

## 3.4.3.1 'Circumvention' sense

Lakoff (1987: 442) observes that "when [conceptualizers] perceive a continuously moving object, [they] can mentally trace the path it is following." So, if the configuration holding between the TR and LM in the protoscene, depicted in Figure 3.1, is combined with a verb designating motion, then the notion of a circular path followed by the TR is invoked, as illustrated in the sentences under (12) and (13):

- (12) a. [A]ll the spheres revolve **about** the Sun as their midpoint, and therefore the Sun is the center of the universe. (COCA)
  - b. [...] some white doves circled **about** the pavilion, or nestled cooing upon the window-sill. (COHA)
- (13) a. The planets Mercury, Venus, Mars, Jupiter, and Saturn moved **around** the Sun. (COCA)
  - b. We can run **around** the block eight times and it won't do anything for his cardio. (COCA)
- (14) Übernimm du kurz, ich geh einmal **um** den Block. (ZEIT)

Similar to German *um* in example (14), the preposition *around* can occur with any verb denoting motion along a path to prompt for an image schema as sketched in Figure 3.5. Contemporary *about*, by contrast, has already lost most of its imagery, so that it needs to be supplemented by verbs, such as *to revolve* or *to circle*, which already entail circular motion as part of their meaning; in the Old English period, on the other hand, it was commonly employed to express actual or implied motion in a circuit or part of a circuit (OED).

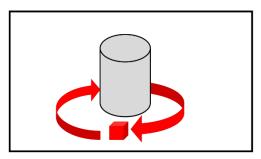


Figure 3.5 Full circular motion around LM

Although complete circular motion around an LM can easily be coded for by *around* and, with some restrictions, by *about*, in their daily interaction with their surroundings, humans are seldom required to move in a full circle around an object, unless it is connected to certain contexts, such as sport or driving a car as in (15) and (16), respectively.

(15) Members of the Dutch team run laps **around** the field. (COCA)

(16) She drives **around** the block a few times before finding a space close to the parking garage he uses. (COCA)

In everyday situations, a partial circular course followed by a human TR features more frequently. Humans often need to go around an object, but this type of movement is normally coupled with a certain purpose, viz. to get to the other side behind the LM. In order to accomplish that, they do need not move in a full circle. Half a circle or even quarter of a circle are often sufficient to reach the other side. The LMs that are circumvented in such a manner usually block the TR's path, but they are too big to simply move over them. In general, it is assumed that "[a] rational agent choice of action usually correlates with the cost-effective way of reaching the goal" (Busogi et al. 2013: 299). "[T]he idea of covering a particular distance in the shortest possible time" is – as Schulze (1993: 413) points out – conveyed by "straight-line movement", which represents the optimal path, so to speak. One can, for example, easily jump over small objects lying on the ground as in (17).

(17) Jess hops **over** the suitcase she was packing and follows me into the motel. (COCA)

This is, however, more difficult, if not impossible, when the object is a bigger obstacle such as a house or a building. Instead of laboriously climbing over them, the most efficient way to get to the desired area behind such LMs is surely to move around them on the ground, as diagrammed in Figure 3.6. A top-down perspective of the 'circumvention' schema is provided by Figure 3.7.

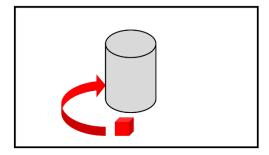


Figure 3.6 'Circumvention' schema

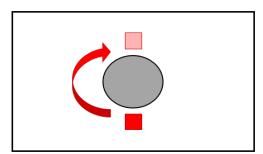


Figure 3.7 'Circumvention' schema – top-down perspective

In contemporary English, the 'circumvention' sense is rarely expressed by *about* and if so, use of *about* is largely restricted to formal or literary style; example (18) below is, for example, drawn from a 19<sup>th</sup> century novel. *Around*, on the other hand, has become the preferred choice for expressing partial circular movement around a three-dimensional LM. In (19a), the subject referent is normally understood as being outside the house, i.e. external to the boundaries of the LM, and moving in a circular route around it, in order to go to the garage. The LM is an 'obstacle' she needs to overcome to reach her intended

goal which is marked by the preposition *to*. A fairly similar reading is prompted by German *um* in (20a), in which the TR, i.e. *Sie*, circumvents the LM, i.e. *das Haus*, to reach its target (i.e. *dem Spielplatz*), here indicated by the preposition *zu*. That the playground is out of sight, being located behind the LM, is additionally specified by the adverb *dahinter*. Is the LM an object such as a house, around which the TR, if needed, could move in a complete circle (as in (20a)), *um* tends to combine with *herum* for the expression of the 'circumvention' sense. Is the LM a noun such as *die Ecke*, as in (20b), where a full circular path motion is ruled out from the outset, *herum* is not needed, and might even sound out of place.<sup>39</sup> Taylor (2003: 156) also observed that since "the LM object, *the corner*, denotes a part of a larger entity", it "cannot, of itself, be fully surrounded."

- (18) Peering into the dark, he passed **about** the corner of the turret. He stopped opposite the parlor windows on the front. (COHA)
- (19) a. Then she walked **around** the house to the garage and got a stack of baskets and began harvesting the apples. (COCA)
  - b. He parked the car and went **around** to help me out of the passenger seat. (COCA)
  - c. Rodriguez got up from the table. "Come on, Trudy. I'll play you a round of Space Battle." [...] Rodriguez went **around** to her chair. (COCA)
- (20) a. Sie gehen **um** das Haus herum zu dem Spielplatz dahinter, wo der dichte Wald sich ein wenig öffnet. (ZEIT)
  - b. Man hält auf dem Parkplatz, geht **um** die Ecke und ist schon im Schloßzentrum. (ZEIT)

In (18) and (19a), the LM is linguistically expressed, whereas in (19b) and (19c), examples of intransitive uses of *around*, it is merely implied, i.e. a car and a table, respectively. The LM may not be overtly expressed, but it still lingers and can effortlessly be inferred from the co-text. Even without an explicit LM, a form of circumvention is usually presupposed in *around*-instances, as opposed to the preposition *to*, which as (21) demonstrates, does not imply an indirect route:

(21) Then I went **to** the library to check out some books and went home. (COCA) The 'circumvention' sense prompted by *about* and *around* in (18) and (19), respectively, can also be used with 'fictive' motion, to use Talmy's term (1996), where the TR itself does not physically move, but the eyes of the speaker (and hearer) "mentally scan an imaginary path" (Radden & Dirven 2007: 26). However, comparing the preposition *at* in

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<sup>&</sup>lt;sup>39</sup> In the ZEIT, there are are five tokens for the construction [gehen um das Haus], all of which are followed by *herum*; in contrast, there are nine tokens for the construction [gehen um die Ecke], none of which is complemented by the adverbial.

- (22) with *about* in (23) and *around* in (24) shows that the latter two actually involve imaginary motion, i.e. an abstract line emanating from the eyes and following the circular path, which is inevitably linked to some kind of physical motion, i.e. craning one's neck or taking a step to the side to see what is located/happening behind the LM.
  - (22) I looked at Paul, who stared with an expression of curiosity. (COCA)
  - (23) [T]hen silently crept forward himself, yet with less caution, until he was able to peer **about** the corner of the cabin and dimly distinguish the blanketed forms of several men lying close in against the side wall. (COHA)
  - (24) Picard moves to look around the corner and sees James T. (COCA)

Since physical, concrete objects are normally not transparent, and humans do not have the ability to see through them, their gaze is perceived of as taking a roundabout route if they want to get a glimpse of what is on the opposite side. That the goal is indeed hidden behind the LM and hence out of the conceptualizer's sight, can be deduced from the following sentences.

- (25) Billy left the cover of the woods, jogged down the hill [...] and then crept **around** the corner and out of Jerry's sightline. (COCA)
- (26) [...] [er] schwenkte kurz sein Hütchen, hüpfte dann die Straße hinunter, ja hüpfte!, und verschwand **um** die Ecke. Und weg war er, [...]. (ZEIT)

In the first two clauses (i.e. left the cover of the woods, jogged down the hill) in (25), the human TR, i.e. Billy, is still in Jerry's sightline, but once he makes a bend around the corner, he disappears from the other's view, as indicated by the prepositional phrase at the end of the sentence. The same schema underlies German um in (26); the TR's disappearance out of view is here already made plain by the semantics of the verb verschwand and once more reinforced by the following clause Und weg war er.

Through pragmatic strengthening, i.e. through repeated use of the prepositions in contexts where the LM could be experienced as some kind of obstacle that has to be circumvented in order to be able to continue one's way, the 'circumvention' schema, has, at some point, been established as an extension from the protoscene (see Figure 3.1). Its existence in semantic memory as a distinct and independent sense is, in particular, suggested by its figurative uses of the type in (27) to (29), in which the notion of obstruction plays a central role:

- (27) Alyssa walks **around** her mother and out of the garage. (COCA)
- (28) a. Immigration officials were a nuisance, but there was always a way **around** them. (COCA)

- b. The way **around** the problem is to turn on the air conditioner to maximum. (COCA)
- (29) a. He got **about** Doobla by cutting a cord or two more than the contract called for, so that when the wood was measured he could say, "I was anxious to have enough, sir." (COHA)
  - b. Even before this, courts tried to find a way **about** the ultra vires defense: estoppel, implied powers... (NYU School of Law)
- (30) Aus Datenschutzgründen ist die Funktion gesperrt. Es gibt aber eine Menge von Wegen **um** diese Beschränkung herum. (ZEIT)

In (27), the human TR, denoted by the proper noun *Alyssa*, is conceptualized as circumventing a human LM, i.e. *her mother*; in other words, she physically moves around her mother, who, intentionally or unintentionally, is blocking her optimal path out of the garage. Thus, in terms of conceptualization, the noun phrase *her mother* can be compared to the LM in sentence (19a) above. In (28a) as well, the TR and LM stand for human beings, the former of which is merely implied, while the latter is designated by the personal pronoun *them*, which refers back to the noun phrase *immigration officials* of the preceding main clause. However, different from example (27), the LM is not physically obstructing the path of the TR but in a figurative sense, that is, it is obviously preventing the TR from making fast progress in the immigration process. The LM in (28b) does not even have physical existence, but stands for an abstract concept, viz. *problem*.

Due to the limited amount of data, it is not clear whether *about* had metaphorical usages to the same extent as *around* or *um* evidently do nowadays, but the sentences (29a) and (29b) seem to support this assumption. Actually, the latter is fairly similar to the German sentence (30). In (29b), *the ultra virus defense* serving as the LM is identified as a problem by *the court* that needs to be circumvented. In (30), the LM, denoted by the abstract noun phrase *diese Beschränkungen*, is likewise viewed as a surmountable object, but in order to circumvent it, one has to take a roundabout route, since the activation of the deactivated applications is obviously illegal; in other words, the metaphorical detour stands for using illegal measures, thereby moving outside the boundaries of the law.

## 3.4.3.2 'Appearance' sense

As regards the development of the 'obstacle' sense, an essential ingredient is the orientation of the movement performed by the TR, which is construed as being directed away from the conceptualizer towards a goal. The complete opposite viewpoint on the

schema underlying the 'circumvention' sense, i.e. motion orientated towards the conceptualizer as the goal, brought about the creation of another usage: the 'appearance' sense. While "[i]n visual perception [speakers] necessarily look at a scene from [their] viewpoint or vantage point, i.e. from the point where" they as observers are located, in cognition, i.e. in their conception of a particular scene, it is also possible to take "another person's point of view" (Radden & Dirven 2007: 23).

Which viewpoint is chosen depends in most cases on the verb used in the construction, since around – and in light of the great developmental similarities, so far, the same can be assumed for about – is "neutral as to the direction of the path (i.e., clockwise or counter-clockwise)" (Dewell 2007: 384). This is effectively demonstrated by the idiomatic expression, What goes around, comes around, whose meaning can roughly be paraphrased by another idiom, namely,  $You \ reap \ what \ you \ sow$ . The verbs come and go have both a "built-in viewpoint on a situation", "designat[ing] motion towards or away from the speaker, respectively" (Radden & Dirven 2007: 24). In using go in the subject clause of the idiom, the (not further defined) TR, i.e. what, is moving in a circular path away from the speaker's location, as diagrammed in Figure 3.6 above; conversely, in using come in the main clause, there is a reversal in the direction of the motion, converting the speaker into the goal, as illustrated in Figure 3.8, in which the dark cross marks the position of the conceptualizer. Figure 3.9 offers a conceptualization of the scene from a top-down perspective.

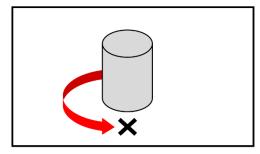


Figure 3.8 'Appearance' schema

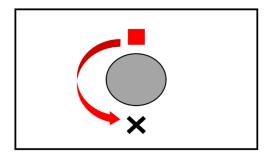


Figure 3.9 'Appearance' schema – top-down perspective

The movement of the TR in the idiomatic expression can hence be somewhat likened to that of a boomerang: first, it is moving away from the thrower, which figuratively signifies the events one has instigated, and after some time (during which it is 'hidden' behind an implied LM), it is returning to its place of origin, the thrower, which, metaphorically speaking, means that the results and effects of the activities set in motion will eventually have an (unexpected) impact on oneself.

The schema diagrammed in Figure 3.8 also forms the basis for the following sentences, which, in comparison to the idiom, are spatial in nature:

- (31) And who should walk calmly **about** the corner of the buildings but Peter himself! My heart stopped beating and I had to lean against the end of the toboggan-slide until I could catch my breath. (COHA)
- (32) Then in the beginning of March I was over talking to Lisa, and Evan came walking **around** the corner and he had a large cut on his eye, like -- at least, like, an inch and a half. (COCA)
- (33) Sobald ein Polizist **um** die Ecke kommt, sollte man besser seinen Wein wegkippen. (ZEIT)

That the first clause of example (31) is based on the schema, depicted in Figure 3.8 and not Figure 3.6, is confirmed by the exclamation mark and the following clause, two elements which, on the part of the conceptualizer, express utter surprise at the sight of *Peter*, i.e. the TR of the spatial scene described by the first sentence. The speaker has apparently not reckoned on Peter's appearance, and is taken aback, since, previously kept out of sight by the LM (i.e. the buildings), he virtually comes out of nowhere. Similarly, in (32), the speaker was able to detect Evan's cut near the eye, because he appeared – and not disappeared – around the corner, entering the speaker's field of vision. Or as Schulze (1993: 415) put it, the TR's "arrival at the imaginary observer turns him/her from an invisible human being into a visible one", an interpretation which is also true for the German example (33); as long as the TR, i.e. ein Polizist, is nowhere to be seen, the consumption of wine does not present a problem, but as soon as a policeman appears on the scene, it is better to dispose of the alcohol. (33) differs from (31) and (32) in that the notion of appearance is even weaker, since the shape of the path leading the officer into view, i.e. whether he comes around the corner, down the street or out of a shop, is of no significance; what is highlighted is his presence, as opposed to his non-presence before.

For Lindstromberg (1997: 135), the expression *come around*, which "is often used in talking about visiting someone" (e.g., "Why don't you come around to my place some time?"), implies that "the visit may be a detour" (since originally the TR was heading toward a different destination) and, correspondingly, "may be a short one", an interpretation for which, however, he does not provide any supporting evidence.

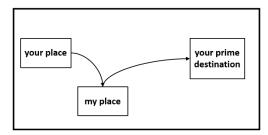


Figure 3.10 *come around to my place* (after Lindstromberg 1997: 135)

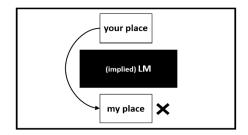


Figure 3.11 *come around to my place* – (implied) LM

The image used by Lindstromberg to illustrate his line of reasoning does not consider the viewpoint of the conceptualizer. The prime destination marked in Figure 3.10 is not a necessary component in the construal of the scene, and actually can be omitted. The notion of indirect route present in such cases may rather be attributed to a non-expressed LM, located between the addresser and the addressee (i.e. the TR) and thus separating them, as illustrated in Figure 3.11. The dark cross indicates the position of the conceptualizer in the described scenario, which equals the location of the addresser. Once the implied LM is successfully overcome by the addressee, he/she enters the addresser's field of vision, i.e. has come to pay a visit. That it is a short one, as suggested by Lindstromberg (1997: 135) is doubtful. The length of the visit does not play any role in the construction of the scene. *Around* rather indicates proximity: the TR may be hidden by the LM, but it is also conceptualized as being in the vicinity of the LM and hence the addresser (and conceptualizer). On this view, a meaning such as 'when you happen to be in the neighborhood' might be indirectly added to the sentence above.

The sense of 'arrival', triggered by the TR-LM configuration of the spatial scene seen in Figure 3.8, has eventually spread out to the temporal domain, by means of the TIME IS SPACE metaphor, to indicate that a certain point or span in time is approaching out of the future as in (34) to (36), coming closer and closer, until it reaches the conceptualizer:

- (34) The elections came **about** in the spring, and, as had been foreseen, Bowdoin was turned out of office, and John Hancock put in his place. (COCA)
- (35) December came **around** and I was excited to see her but kind of uneasy too. (COCA)
- (36) Auch ich fange an zu glauben, dass glorreiche Tage **um** die Ecke kommen werden, schrieb der frühere Nationalspieler bei Twitter. (ZEIT)

It must be noted that the German example is subtly different from the two English sentences. To begin with, the preposition *um* here takes a complement, i.e. the noun phrase *die Ecke*, while (34) and (35) do not. In addition, the metaphorical reading – prompted by the prepositions *about* and *around* in the English samples – is here dependent on the entire phrase *um die Ecke kommen*, which has the status of an idiom in

German. Nonetheless, with the exception of the overt LM, the schema underlying this idiomatic expression is comparable to that of (34) and (35) (see Figure 3.8). It can also be presumed that the idiom's metaphorical meaning derived from the literal 'appearance' sense seen in (33).

Since the time-TR is conceptualized as a moving entity in the sentences (34) to (36), they can all be described as being dynamic, and as such they differ from the perhaps most well-known temporal usages of *about* and *around*, as shown in (37) and (38), whose configuration seems to derive from a different sense altogether, namely, the 'approximation' sense (see also section 3.4.6.3), and, for this reason, is inherently static:

- (37) And then I thought we'd have dinner **about** nine o'clock. (COCA)
- (38) I went to bed probably **around** ten o'clock. (COCA)
- (39) Aber wenn wir mit ihnen gemeinsam einen Kaffee einnehmen könnten, so **um** zehn Uhr herum? (ZEIT)

The events described by the main clauses, i.e. the action of 'having dinner' in (37), of 'going to bed' in (38), and of 'drinking coffee' in (39) are located in the neighborhood of a time-LM. Here, *about*, *around* and *um...herum* do not suggest any sense of directionality or dynamicity, but profile the brief period of time before, and after, *nine* o'clock, ten o'clock and zehn Uhr, respectively.

From uses in the spatial and temporal domain, the 'appearance' sense has also been imposed on other abstract situations, which could be attributable to the division of the scene into two zones: accessibility and non-accessibility. The spatial 'appearance' sense, as discussed in (31) to (33), intimates that the conceptualizer is in view of one area, while the other is out of sight, concealed by the LM. The spatial scene can, as a result, be divided into the sections 'visibility' and 'non-visibility', depicted by the red and black areas in Figure 3.12, respectively.



Figure 3.12 visibility vs. non-visibility

This contrast, initially pertaining to the visual field, has been extended to more abstract domains. For this reason, a sentence such as *I couldn't bring her around* can be interpreted in different ways, depending on the situated knowledge the speaker/hearer possesses. It

could be meant spatially and be akin to sentences such as (31) to (33) above, that is, the subject referent was not successful in taking the TR, i.e. *her*, to the addressee; put differently, the addressee does not get to see her. This sentence, however, does not necessarily trigger a reading in terms of visibility and non-visibility, but could also suggest other opposites such as 'consciousness' vs. 'unconsciousness', or 'one opinion' vs. 'another opinion' (see also Schulze 1993: 415-416), as illustrated in the sentences under (40) and (41), respectively:

- (40) a. Then the crunch of a heel in the sand brought him **about**. He had forgotten his pursuers. (COHA).
  - b. [H]e fell on the floor. I put some ice packs around his waist and on his face, but I couldn't bring him **around**. (COCA)
- (41) a. If he could gibe and tease, she could bring him **about** with her cool audacity and comical dignity. The girl's splendid physique, her athletic tendencies, her endurance and pluck, compelled Jock's masculine admiration. (COCA)
  - b. He wanted to take along the box with his uniform, but she brought him **around** to taking just the jacket instead. (COCA)
- (42) a. Die Kanzlerin hat sie **um**gestimmt nicht mit Druck, mit Bitten oder Schmeichelei, sondern mit einem Deal. (ZEIT)
  - b. Anfang 2000 wollte der Katarer bin Hammam noch für Südafrika stimmen. Was stimmte ihn **um**? (ZEIT)

In (40a), the TR, realized by the direct object *him*, has been lost in thought, unaware of his surroundings for a while, until a sudden sound brings his mind and thoughts back to reality. In (40b), the TR, designated by the direct object *him*, has apparently collapsed and the subject referent tries to bring him back to consciousness, but her efforts are ineffective. Sentences (41a) and (41b), on the other hand, implicate a change of mind on the side of the TR. The subject referent in (41a) succeeds in convincing the human TR, i.e. *him*, of her qualities – of which, it seems, he has formerly not been cognizant – and thus wins his admiration. The TR in (41b) abandoned his idea of taking the box with him and adopts the other person's view of what might be best in the situation, namely, *taking just the jacket instead*.

In German a change of mind can be coded by *um* as well. However, in instances such as (42a) and (42b), it is traditionally not regarded as a preposition, but as a particle. "There are quite a lot of particle verbs with *um* that seem to denote some [...] change of state" (e.g. *umbauen* 'renovate', *umbenennen* 'to rename', *umdenken* 'to change one's view of sth etc.), but according to Wunderlich (1993: 132), "it has nothing to do with the preposition *um*". He maintains that "nothing could make the derivation of both the preposition *um* and the particle *um* from a common [...] semantic source plausible"; the

latter needs to be considered "as having simply acquired another idiosyncratic meaning" (Wunderlich 1993: 132). However, particle um has much in common with the intransitive uses of about and around in (40) and (41), which, in principle, also express a 'change of state' that, as has been shown, most likely goes back to the division of a spatial scene into the two contrasting areas of visibility and non-visibility (see Figure 3.12), which have been invoked by the transitive uses (see examples (31) to (33)). This oppositeness has then been applied to other, less concrete domains, but virtual movement from one abstract area to another, nonetheless, expresses a change of state.<sup>40</sup>

Although the sentences under (40) and (41) are already derived abstract readings of the spatial 'appearance' sense, they all feature TRs that are realized by human beings. In contemporary usage, abstract TRs are also possible for both about and around, but they more frequently occur with former. Lindstromberg (1997: 132) remarks that the circular spatial meaning of about "survives in several phrasal expressions such as" to bring sth about 'cause sth' and to come about 'happen', but he does not offer an explanation of how these already rather abstract meanings are related to the older spatial ones. The present discussion, however, has shown that these traces of spatial imagery, as detectable in the examples under (43) and (44), lead back to the combination of the 'circumvention' sense with an orientation of the TR that takes the conceptualizer as the deictic center:

- (43) a. But is that going to bring **about** jobs or halt the rising punishment industry?
  - b. To begin with, you need to know how and why the book came **about**. (COCA)
- (44) a. And these foreign objects, as they're called, can almost totally destroy an engine or bring **around** a catastrophic destruction. (COCA)
  - b. I remember when (the television series) 'Miami Vice' came around... and a lot of chamber of commerce types thought,' Oh my God! (COCA)

 $<sup>^{40}</sup>$  Arguments in favor of positing the particle um as a conceptual extension of the preposition – in other

words, a potential link between the preposition um and particle um – may be provided by the idiomatic expression jemanden um die Ecke bringen, which is more or a less a euphemism for killing someone. As already said, if a person disappears around a corner, he or she automatically leaves the conceptualizer's field of vision. Disappearance of the TR is here equated with death of the TR, that is, disappearance from the world of the living. Since the movement by the human TR is not self-initiated, but other-initiated, it follows that someone made that person disappear. The German expression jemanden umbringen 'to kill somebody' is just a shortened version of that figure of speech, a version without an overtly expressed LM. However, in terms of traditional syntax, um is used as a preposition in the idiom (e.g. Er brachte ihn um die Ecke.), whereas it is often referred to as a particle in Er brachte ihn um. Not only the particle um can be related to the preposition, but also um as in Die Zeit is um. The idiomatic expression, Das ist schon längst um die Ecke meaning that something is long gone, is likewise based on the 'circumvention' image schema. If an abstract entity such as time disappears around the corner, it means that the time is up, no longer available. The omission of the LM might have then given rise to this meaning of um, which is chiefly used with temporal TRs as in Das Semester/der Sommer/der Tag ist um.

All of these sentences are of an abstract nature, but the (a) examples are different from the (b) examples in that they involve a trigger, usually coded as the sentential subject, which exerts some force on the TR, typically coded as the sentential object. In (43a), the demonstrative pronoun *that* most likely refers to a governmental measure which is supposed to help in creating new jobs (i.e. the TR) and reducing the prison population in the country. In (44a), analogously, the imposer of force is denoted by the subject, i.e. *these foreign objects*, which are seen as the cause of the situation denoted by the object, i.e. *a catastrophic destruction*.

In contrast to the (a) sentences, the (b) examples do not need an additional, external energy source, but are evidently conceptualized as happening of their own accord, although it is common knowledge that both an object like *the book* in (43b) or the TV series *Miami Vice* in (44b) are products of humans and their actions. It is the production, the coming into existence, which is foregrounded, whereas the notion of an entity following a path is gradually receding into background in (44b), and entirely lost in (43b).

Apart from the difference concerning the overt expression of the energy source, the (a) and (b) examples have one crucial property in common: the covert nature of the LM. In such abstract cases, the LM is also not inferable from contextual information, since it is not a concrete entity that exists in the outside world. What is left from the LM of the spatial 'appearance' uses, as in (31) and (32), is just the notion of hiding the TR from view, while the abstract TR, as conceptually materialized entity, emerges from behind the equally abstract LM, either on its own or due to an instigator as shown in the (a) and (b) samples, respectively.

Worthy of note is also that the spatial senses discussed so far are no longer, or rarely, coded for by *about* in contemporary English. The opposite is true, however, for the abstract 'appearance' sense, which is typically expressed by *about*. As seen above, *around* can likewise be used for the expression of this sense, but corpus data shows that it is far more frequently used for the spatial counterparts which do involve oriented physical movement on the part of the TR – be it self-initiated or externally-triggered. It is, as already mentioned, an especially common construction in visiting contexts, as in (45) and (46):

- (45) I'll have Carl bring the car **around** and we'll go together. (COCA)
- (46) I told him to come **around** to the office tomorrow morning, eight o'clock sharp. (COCA)

Schulze (1993: 415) states that "[t]he non-straight-line movement of [the TR] is directed to an imaginary observer, so that the schema of at least two meeting entities is evoked". The TR, whether *the car* in (45) or *him* in (46), is expected to physically undergo a change in position. Entities that can move or can be moved from one place to another seem to be the prototypical TRs in *around's* 'appearance' sense. For example, the COCA provides a total of 24 tokens of the word sequence [bring around], only one of which was grounded on a schema other than the 'appearance' schema. Out of the 23 'appearance' senses, 6 (in fact, only 4, because 3 sentences are exactly the same) have an abstract TR, whereas the majority, 17 samples in total, have physical entities serving as the TR, such as people, money, or vehicles. Thus, the abstract and non-abstract TRs account for approximately 20 and 80 per cent of the data, respectively.

The complete opposite can be observed for *about*, which, since it is considerably older than *around*, had more time to develop and conventionalize the 'appearance' sense in abstract domains. The first noticeable difference is in numbers: against 23 samples of the construction [bring around], the COCA records more than 2600 sentences comprising the word sequence [bring about]. Further, a closer look at the first hundred entries reveals that all of them have abstract TRs, i.e. concepts such as 'change', 'closure' or 'peace', to name a few. The same holds true for *come around* versus *come about*. While the former involves TRs realized by people or concrete objects, the common feature of the TRs occurring with *come about* is definitely their abstractness.

### 3.4.3.3 'On-the-other-side' sense

Considering that it is common to observe a moving TR until it comes to a halt when it has reached its goal, and afterwards to concentrate on where it is, it was to be expected that the path schema, as represented in Figure 3.7, would eventually lead to the establishment of a location schema, as diagrammed in Figure 3.13, a process which Lakoff (1987: 442) describes as the "path focus" to "end-point focus" transformation. In other words, there has been a shift from the movement taking place to the result itself.

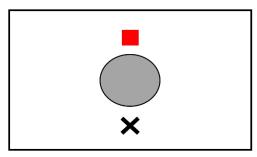


Figure 3.13 'On-the-other-side' schema

While the schema in Figure 3.7 profiles the act of the TR moving from position A around an LM to reach position B, which, from the view of the conceptualizer, is located behind, or next to the LM, the configuration in Figure 3.13 puts clear focus on position B, that is, the endpoint of the path. The former goal of the 'circumvention' sense has come to represent the location of the TR in the novel sense. This 'on-the-other-side' notion is especially used with three-dimensional LMs that block the view of the conceptualizer (depicted as a dark cross) so that from her/his current standpoint, the TR cannot be seen, i.e. is "hidden", as illustrated in (47) to (49), for *about*, *around* and *um*, respectively:

- (47) It was just **about** the corner where the P. and O. Co.'s offices stand that the arches of the bridge crossed the stream. (1931, The Sydney Mail)
- (48) Our apartment is just **around** the corner from our new favorite bar See If, and that's where Benji, Sara, and I go after our meeting. (COCA)
- (49) Hier geht es rauer zu als in der netten Trattoria **um** die Ecke. (ZEIT)

While the 'on-the-other-side' sense is commonly associated with *around*, this is not true for *about*. The OED, for example, does not even list it as one of the senses that was ever coded for by *about*. However, example (47) above, from a newspaper article that was published in The Sydney Mail in 1931, calls to mind a schematic structure as diagrammed in Figure 3.13, a meaning that contemporary English and German speakers express by means of *around* and *um*, respectively.

However, the existence of an 'on-the-other-side' sense for *about*, now mostly obsolete, is supported by the fact that the same schema was in all likelihood also used for temporal meanings, since in terms of conceptualization, the following two sentences clearly share great similarities, and may even be considered identical:

- (50) Summer is just **about** the corner. (1930, The Milwaukee Journal)
- (51) Summer's right **around** the corner, you know. (COCA)

Again, sentence (50) may sound odd to contemporary speakers; admittedly, it is taken from a newspaper article which was written in 1930, but it nevertheless indicates that *about* had the capacity to code for this type of meaning whose schema still draws on

fractions of the circular image of the protoscene. The incapability of contemporary *about* to designate meanings, as in (47) and (50), might be attributed to the total loss of its original imagery.

As is evident from (50) and (51), the temporal meaning is not completely static; the circular-shaped path has remained part of the image schematic structure. In both sentences, the TR, i.e. *summer*, is out of sight for the moment, "hidden" by the abstract LM, but they at the same time also suggest that the summer is soon coming around the corner and hence coming into view. In this sense, it bears great resemblance to the 'appearance' sense, discussed above, the only difference being that the main verb, a form of *be*, implies a static reading of (50) and (51). The open dynamicity of situations as described in spatial (31) and (32), and temporal (34) and (35), is here somewhat more covert.

Furthermore, in particular with contemporary *around*, it is patent that the 'on-the-other-side' sense also implies 'proximity'. While one might argue that in (50) and (51), the fact that the TR is viewed as being near could be attributed to the adverb *just* and *right*, respectively, the notion of nearness is also present in sentences without them:

- (52) Follow this aisle down and then make a right. His office is **around** the corner. (COCA)
- (53) It's December. Christmas is **around** the corner. I have been making my lists and checking them thrice. (COCA)
- (54) So since the wedding is **around** the corner, I think we need some rings. (COCA) In the locative sense in (52), the directions given by the speaker already make it clear that the TR, i.e. *his office*, is not far away, but easily reachable. This spatial closeness might have then been applied to the temporal TR in (53) and (54), suggesting temporal closeness. The TR in the latter, i.e. *the wedding*, might not be a prototypical time-TR; however, it does not just refer to the marriage ceremony itself, but strictly speaking, to the day when the marriage ceremony will be held. In light of this, both *Christmas* in (53) and *the wedding* in (54) are conceived as entities approaching out of the immediate future for whose arrival the speakers are already making the necessary preparations, i.e. creating and checking lists or buying wedding rings, respectively. That a point in time can be conceptualized as an entity moving towards the conceptualizer is shown in (55):
  - (55) I hope the time will come when she's willing to talk to me without you. (COCA)

The subject referent of the subordinate clause, i.e. the noun phrase *the time*, is used together with the verb *come*, which as stated above, has a "built-in viewpoint on a

situation", that is, "the motion is directed towards the speaker as the goal", i.e. the subject I (Radden & Dirven 2007: 24). The statement made in (55) is also described as the "time-moving metaphor", in which the conceptualizer is "a stationary observer, and the time is a stream that moves past [him/her] from the future to the past" (Boroditsky 1997: 869).

### 3.4.4 Cluster B

## 3.4.4.1 'Succession' sense

While in the protoscene, the TR is placed or visualized in a circle around the LM (see Figure 3.1), it can, as seen above, also follow a uniformly curving path, making a complete orbit around the LM (see Figure 3.5). Figure 3.14 shows that sometimes this path around the LM may consist of several individual stations that the TR needs to traverse, i.e. it moves from place A to place B, from B to C, from C to D, and so forth, up to the point where it has arrived at A again and thus closes the circle.

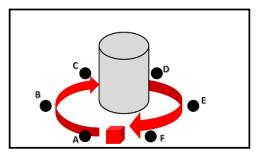


Figure 3.14 'Succession' schema

The conceptualization of a path which comprises a number of stopping places might have resulted in the establishment of the sense 'in succession', a meaning which already OE *about* used to code for (OED), but is now most commonly expressed by *around* in English and by *um* in German.<sup>41</sup>

- (56) Spivak ladled stew into disposable bowls and passed them **around** the table. (COCA)
- (57) Beatrix, nun Prinzessin, wirk [sic!] gefasst und lächelt immer wieder, während im Mosessaal des Palastes die Abdankungsurkunde **um** den Tisch wandert. (ZEIT)

As can be seen from examples (56) and (57), the stations making up the trajectory followed by the TR are located around the LM (i.e. *table* and *Tisch*, respectively). They are not overtly coded by linguistic expressions, but are derivable from the context: people which are seated around a table. The TR, realized by the noun phrases *the bowl* and *die* 

<sup>&</sup>lt;sup>41</sup> The OED notes that, in some regional varieties of American English, the 'succession' sense is still associated with the preposition *about*.

Abdankungsurkunde, respectively, does not simply move in a circular motion around the LM, but is conceptualized as coming to a stop at each person before continuing its path, a TR-LM arrangement that gives the impression of "purposive processing" (Schulze 1993: 425).

At some point, this notion of 'succession' has become so established that the LM need not be directly expressed. Even without an LM serving as a reference point, the TR is normally perceived of as passing through all the stations found along the road, except for the fact that the circle schema is not as strong as before. In fact, in the sentences under (58) to (60), the path followed by the TR could take any imaginable form. If an explicit LM is missing in German, the 'succession' sense is realized by the adverb *herum*, a compound of the adverb *her* and the preposition *um*.

- (58) a. The letters exchanged by them were passed **about** also among the other young people of the circle. (COHA)
  - b. And the babe must be handed **about** from one to another, kissed and blessed. (COHA)
- (59) a. The prayer was printed on mimeographed sheets which were handed **around** so everyone could join in. (COCA)
  - b. Other people handed **around** Doritos and brownies. (COCA)
- (60) Er reicht Bilder her**um** und beginnt, über den Krieg zu reden. (ZEIT)

Assuming that the act of passing the TR from one person to another takes place in a confined space such as a room, one could argue that it is conceived of as moving within a circular path around the insides of that bounded region. However, once the LM – whether linguistically expressed or not – is no longer an object or an enclosed three-dimensional room, but an open space that is usually conceptualized as a flat surface, the circular route gradually comes out of focus; now "all that is at issue is the random, convoluted nature of the path" (Taylor 2003: 159), as in the examples below.

- (61) a. Scarlett moves **about** from Atlanta to Charleston, from Savannah to Ireland, chasing Rhett. (COCA)
  - b. They move **around** from place to place at night because they don't feel safe. (COCA)
- (62) a. He traveled **about** the country making speeches in behalf of reform and the Bureau. (COCA)
  - b. We've been traveling **around** the country, meeting with farm women, women in small towns. (COCA)
- (63) Er reiste her**um** und besuchte Freunde auf der ganzen Welt, von denen einige schon [Firmen] gegründet hatten. (ZEIT)

The conceptualization of the spatial scenes in the sentences under (61) to (63) does not involve the schema of a completed circle, which would imply that the TR moves along the external boundary of the LM. It rather suggests a number of different stations that have been visited, which, in (61a) and (61b), is also made clear through the addition of the prepositions *from* and *to*. As a consequence, the route taken by the TR is here situated inside the LM, which is thought of as a two-dimensional entity. The same observation is made by Lindstromberg (1997: 133) for the sentence *Let's swim around the lake*, for which, however, he continues to presume a path whose shape is an idealized circle. In his view, *swim around a lake* "can hardly mean anything other than what is" illustrated in Figure 3.15 below (Lindstromberg 2010: 135).

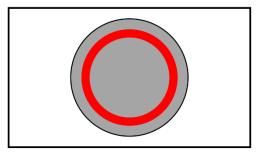


Figure 3.15 swim around the lake

Taylor (2003: 156) is of the same opinion and argues that due to speakers' knowledge "about lakes [...] and sailing", a sentence such as *The boy sailed round the lake* "can **only** be interpreted according to [emphasis added]" the diagram in Figure 3.15, an interpretation which is feasible and cannot be categorically rejected, but which is certainly not the only one nor the most likely. Compare the following three sentences:

- (64) a. In 1911, a young woman swam **around** the lake five times to set a long distance swimming record. (GOOGLE-US)
  - b. Dale leisurely swam **around** the lake seemingly unaffected by the cold. (GOOGLE-US)
  - c. In 2007, there were 56 million stripers swimming **around** the Atlantic and its estuaries, gobbling up crabs, herring, and, of course, menhaden. (COCA)

The schema depicted in Figure 3.15 certainly forms the conceptual base for (64a), as indicated by the following adjunct *five times*. *Around* in (64b), on the other hand, invokes motion in various directions, and is not necessarily restricted to an exclusively circular path. Such an interpretation is even non-sensical for (64c); it is extremely unlikely that millions of striped bass are conceptualized as relentlessly swimming laps in the vast ocean. Movement in all directions, back and forth, is the conventional reading prompted by (64c).

## 3.4.4.2 'Here-and-there' sense

The different stations present in the 'succession' sense, which, as shown, might not be aligned along a piecewise linear route around the LM, but randomly distributed all over it, might have become entrenched in *about's* and *around's* lexical structure through pragmatic strengthening. One piece of evidence is the ambiguity of the sentence *She walked around the house*. There are, at least, three possible interpretations: first, the LM could be viewed as a kind of object around which the TR moves in a circuitous route (see Figure 3.5); second, the LM might be viewed as being circumvented by the TR (see Figure 3.6 and 3.7); third, the LM could be conceived as a flat surface on which the TR moves to and fro, in various directions, with no specific endpoint implied. Which reading applies is decided by the preceding and following clauses along with the situational context.

For example, the co-text of the examples (65), (66) and (67), all of which contain a combination of the verb *walk*, the preposition *around* and the noun phrase *the house*, functioning as prepositional complement, helps considerably in removing the ambiguity and determining which out of the three semantic variants is selected. Also, note that from today's perspective, the use of *about* would sound rather unusual in (65) and (66), which exemplify the configuration of the protoscene and the 'circumvention' sense, respectively, but it is a quite possible, albeit more formal, alternative in (67), the 'hereand-there' example.

- (65) Palmberg crawled out of the cage, stretched, **walked around the house** a couple of times, and stood outside on the steps, drinking in the fresh air and looking at the garden. (COCA)
- (66) [B]ut when no one spoke, he shrugged and walked around the house to his truck parked at the back. (COCA)
- (67) Imagine that you're **walking around the house** without shoes and you slam your toes into a heavy wooden chair leg. (COCA)

In (65), the TR, i.e. *Palmberg*, is in the proximal exterior of the house, as indicated by the following adverb *outside*, whereas the noun phrase *a couple of times* signals complete encirclement of the LM. In (66), the TR, i.e. *he*, moved in a semi-circle around the LM, from the front of the house to its back, in order to get to the truck, which the preposition *to* marks as the goal of the action. However, the path followed by the TR in (67) does not in the least call upon the image of a full or partial circle. Instead, there are apparently a number of places in the house at which the TR comes to a rest for some time, which could be anything from a couple of seconds to several minutes or hours. To this point, the configuration accords well with the 'succession' sense (see sentences (58) to (60)), but it

diverges from the latter in that there is no predetermined and targeted number of stations (e.g., the number of people around a table or in a room). If the number of stations is unclear, there is no goal that needs to be reached. A corollary of this implication is that, in certain constructions, both *about* and *around* connote aimlessness, idleness or frivolousness (OED).

That the notion of purposelessness has been added to *about's* and *around's* semantics at a later stage of their development and did not precede the 'succession' sense – as the analysis by Schulze (1993: 425) suggests – is underpinned by diachronic data. While the 'succession' sense was already coded for by *about* and *around* during the Old English period and the 16<sup>th</sup> century, respectively, the weakened sense of movement in combination with the concept of idleness only appeared in the first half of the 17<sup>th</sup> century and the 18<sup>th</sup> century, respectively (OED). Another indicator is that the considerably older *about* is no longer used for the expression of the 'succession' meaning, while the 'hereand-there' meaning is still part of its semantic repertoire – although it is true that in contemporary English, *around* has become the preferred alternative in both cases.

- (68) a. He didn't frown or shout, he didn't run **about**. (COCA) b. Everyone was running **around** like the sky was falling. (COCA)
- (69) a. In actual life it seemed there was a great deal of sleeping **about** among good people [,] much more sleeping about than passion. (GOOGLE-US)
  - b. They also liked sleeping **around** and drinking, but that seemed a by-product of their new lives. (COCA)
- (70) a. Equally natural was the absorption of the Baltic provinces, which had been bandied **about** from power to power, but had never been Russian, and, much later, of Finland, which had been Swedish. (COHA)
  - b. The conversation naturally flowed **around** from career to travel to getting an apartment. (COCA)

The concept of movement present in (68a) and (68b) becomes less important in (69a) and (69b). On its normal interpretation, the verb *sleep* does not denote motion – on the contrary, but in conjunction with *about* in (69a) and *around* in (69b), it insinuates that the TR, which stands for humans, has moved from one person to another person, meaning that they slept with numerous different people. (70a) and (70b), furthermore, demonstrate that movement in various directions, from one station to another, without any particular goal, does not necessarily have to be spatial. In both sentences, the LMs are abstract concepts, namely, 'political control' (i.e. *power*) in the former and 'conversation topics' (i.e. *career, travel* and *getting an apartment*) in the latter. Also, the abstract change of location that the TRs in (70a) and (70b) undergo points to a conceptual metaphor that is "widely exploited in English", viz. CHANGE IS MOTION (Radden & Dirven 2007: 274).

Noticeably, this imaginary motion is closely bound up with the notion of 'aimlessness', which becomes even more foregrounded in the sentences below.

- (71) Mostly, they spend their days lying **about** the house, waiting for the call. (COCA)
- (72) I feel like I shouldn't just be sitting **around**. (COCA)
- (73) Was gibt es daran auszusetzen, dass ein 54-jähriger Exminister noch mehr vorhat im Leben als zu Hause her**um**zusitzen? (ZEIT)

All three examples are alike in that the LMs "designate two-dimensional areas or areas which are conceptualized as two-dimensional" (Schulze 1993: 421). In addition, movement is not linguistically expressed, given that normally neither the English verbs *lie* and *sit* nor the German verb *sitzen* denote motion, but it has a covert existence. For example, the TR in sentence (71), i.e. *they*, is understood as occupying different positions in the LM, i.e. *the house*, since it is unlikely that the subject referents do not move for several entire days. Rather, all three sentences invoke a reading in which the TR "successively occupies various positions in an area, which in an overall view, appears as an unstructured whole of different locations" (Schulze 1993: 421). In order for the TR to get from one position to the other, some sort of movement is needed, since a person cannot be in two (or more) different places at the same time. This unstructuredness and randomness is the main rationale for naming it the 'here-and-there' sense, a conceptualization of which is represented in Figure 3.16.

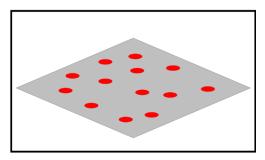


Figure 3.16 'Here-and-there' schema

The 'here-and-there' schema can also be imposed on situations that are essentially static and non-controlled. In the following sentences, not only the semantics of the verbs, but also the inherently inanimate nature of the TRs hint at the total absence of any sense of movement:

- (74) a. There are several open trunks lying **about** the room in various stages of completed packing. (COHA)
  - b. It will never do, he added, to charge anybody with having taken the money, when it may be lying **about** the room. (COHA)

- (75) a. There are books lying around the house. (COCA)b. Money lying around the house began to disappear. (COCA)
- (76) a. Leere, umgekippte Flaschen liegen her**um**. (ZEIT) b. Zerbrochenes Werkzeug liegt her**um**. (ZEIT)

All sentences contain multiple TRs scattered across an area. While in the (a) samples, this is indicated by the plural form of the noun (i.e. *trunks*, *books*, and *Flaschen*), in the (b) sentences, it is encoded by mass nouns that call to mind multiple objects. The noun *money* in (74b) and (75b) is conceptualized in terms of several banknotes/coins and *Werkzeug* in (76b) in terms of different pieces of tools. This, in effect, completely static sense thus evolved from the preceding, more dynamic uses, and might have reached a new stage in its development in the phrase *all around*, which also means randomly scattered, but with a much higher degree of density.

## 3.4.4.3 'Covering' sense

At first pass, the concept of 'here-and-there', which connotes random distribution in a place, seems incompatible with a word like *all*, which prototypically is associated with completeness and entireness. However, if one and the same entity, or entities of the same type, are conceptualized at different locations of a given space, it might not be that great a leap to a sense meaning 'everywhere'. The quotation in (77) by the American writer Dr. Seuss (1960) shows that the notion of being 'here and there', i.e. being randomly distributed in some places of an area, can be expanded to covering all places of that area, <sup>42</sup> a connection which is also illustrated by the news headline in (78):

- (77) From there to here, from here to there, funny things are everywhere!
- (78) Bears **here**, **there** and **everywhere**: Wild animals rule, possessing homes, parks, cars & boats (RT News)
- (79) Adobe hopes you'll sign here, there and everywhere (Grunin 2016)
- (80) Sie ist **hier** und **da** und **überall**. Sie hackt Holz, macht das Feuer, kümmert sich um die Wäsche, bereitet das Essen vor und sorgt dafür, dass Knud den ganzen Tag seine Medizin bekommt. (ZEIT)

Bears, the TR in (78), that appear in an unsystematic, unpredictable manner in various places all over America (i.e. the two-dimensional LM) are perceived as being almost everywhere. Example (79) differs from (78) in that the TR is not a physical entity, but an

<sup>&</sup>lt;sup>42</sup> Here, there, and everywhere is even listed as a common English idiom in, for instance, *The Oxford Idioms Dictionary for Learners of English* (2006).

event – in this case, an act of signing. Initially, users may start applying the advertised program to some of their documents, but the aim is to have them apply it to all of them. (80), lastly, shows that this integration of randomness and totality is not a typically English phenomenon, but can also be found in the German language. Similar to (79), the TR here does not refer to an entity occupying various places, but a human occupied with various activities, giving the impression that she is the only person working in the household; that all the domestic chores are done by her alone.

Against this backdrop, it could be said that the expression *all around* "has a meaning similar to but somewhat different in nuance and usage from" *all over*, as noted by Lindstromberg (2010: 138-139). He argues that *all around* can occur in cases of "(non-ring-like) dispersal over largish horizontal surfaces such as countries", yet comes to the conclusion that this type of meaning surfaces "in relatively few contexts" and therefore gives preference to a ring-like arrangement, a pattern that, according to Lindstromberg (2010: 138), is primarily present when *around* is combined with a three-dimensional LM such as, for instance, the noun *building* in (81a).

- (81) a. Then, with fire trucks, hoses and 50 firemen **all around** the building, the chemicals were ignited. (COCA)
  - b. "[...] We knew every member by name," recalls coach Jim Rutberg, who joined the company in late 1999. There were high-fives **all around** the building every time somebody signed up. (COCA)

Certainly, a ring-like arrangement of the TR is the most plausible interpretation for sentence (81a), since fire trucks are seldom encountered inside a building. The TR in (81b), by contrast, is most likely internal to the LM's boundary. The building is conceptualized as a two-dimensional space, prompting a mental image akin to that in Figure 3.16, but with an even denser distribution due to the intensifier *all*, so that the multiple TR might be perceived as covering the entire surface, as illustrated in Figure 3.17.

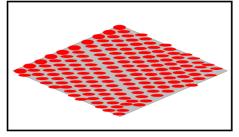


Figure 3.17 'Covering' schema

As mentioned, Lindstromberg (2010: 139) puts forward that this type of dispersal makes its appearance only in a small number of contexts, yet data from the COCA points in a different direction. Already a quick look reveals the top ten LMs of *all around*: *world*,

country, globe, room, house, city, place, town, area, United States, all of which are often viewed as flat surfaces.<sup>43</sup> For Lindkvist (1976: 133), the "conception of locality involving a surface or extent" forms an integral part of around's semantics – and also of about's. The following example illustrates that a 'covering' reading as sketched in Figure 3.17 could also be coded by the latter when used with *all*.

- (82) [...] and, while her magnificent black hair fell, in loose and glorious profusion, **all about** the floor, where he knelt with her. (COHA)
- (83) a. Die Stromkabel lagen **überall** her**um** wie dicke, störende Schlangen, die Kumpels traten sie beiseite, [...] (ZEIT)
  - b. Überall um die Hütten herum gibt es nur Müll, Staub und Dreck. (ZEIT)

In German, the 'covering' schema is evoked by combining the adverb *überall* 'everywhere' with the particle *herum*, as in sentence (83a). *Überall* can also occur with the preposition *um* as in (83b), but then it conjures up a different TR-LM configuration, namely, that of the 'surrounding' sense (see section 3.4.6.1). Typically, the construction *überall um* is accompanied by the adverb *herum* so that the words iconically encircle the phrase serving as the LM. The multiplex TR (i.e. *Müll*, *Staub und Dreck*) is conventionally interpreted as being outside the LM (i.e. *die Hütten*), exterior of its boundaries, as opposed to (83a), where the wires are understood to be internal to the implied LM – be it a room, a house or a garden. Accordingly, in (83a), the implied LM is visualized as a two-dimensional surface, whereas the huts in (83b) are conceptualized as three-dimensional objects.

If the LM is conceptualized as being two-dimensional, then the meaning of *all around* – and former *all about* – is indeed comparable to the 'covering' sense of *all over*, but since the 'everywhere' sense has developed from the 'here-and-there' sense, as discussed above, it differs from *all over* in terms of conceptualization, which also effects its usage. Analogous to the static 'here-and-there' sense (see sentences (74) and (75)), the 'covering' sense of *around* frequently involves multiple TRs, which may be attributed to its source, the 'succession' sense whose conceptualization involved several stations the TR is supposed to pass (see section 3.4.4.1). Thus, the linguistic expressions designating the TRs are predominantly plural forms such as *people, parties, companies, communities* or *governments*. Nouns such as *countries* or *cities* also commonly feature as TRs, yet they have been reduced to mere dots on a surface which is in turn designated by nouns such as *world*, that is to say, entities that are even larger in size.

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<sup>&</sup>lt;sup>43</sup> The archaic conception that the earth is flat, to which many ancient cultures subscribed (Alexander 1964: 249), also demonstrates that the world can often be thought of as a plane.

Owing to the general restriction to multiple TRs, the degree of covering implied by *all* around is not as high as that invoked by *all over*, which can easily combine with mass nouns such as *blood*, water or mud, as shown in (84) to (86), respectively.

- (84) There was blood **all over** the front yard, the driveway. (COCA)
- (85) She's dripping water **all over** the floor, can't stop to towel off. (COCA)
- (86) You're getting mud **all over** the carpet, Peter. (COCA)

Since the TRs, being "[p]rototypical physical substances", are characterized by their unboundedness, homogeneity and uncountability, (Radden & Dirven 2007: 69), the 'covering' schema of *all over* with two-dimensional LMs might be more akin to the diagram in Figure 3.18 than Figure 3.17.

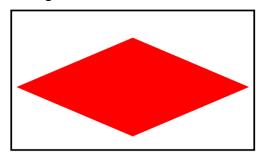


Figure 3.18 Schema of *all over* with two-dimensional LM

On the other hand, corpus data indicates that if *all around* is used with these types of mass nouns, the LMs are not surfaces such as *yard*, *floor* and *carpet* above, but usually three-dimensional entities. In most cases, they are realized by personal pronouns or noun phrases denoting different parts of the human body. The sense triggered by *around* is also not the 'covering' sense, but actually bears resemblance to the 'surrounding' sense, discussed later in section 3.4.6.1. While total concealment of the LM by the TRs is highlighted with *all over*, regardless of the dimensionality of the LM, as shown in the (a) examples below, the (b) examples (i.e. comparable sentences with *all around*) rather foreground that the LM is surrounded by the TR from all directions.

- (87) a. He had blood all over him. (COCA)b. There was a cloud of blood all around him in the water. (COCA)
- (88) a. There were still lots of puddles on the street, so when the bus passed, it hit a giant one, splashing muddy water **all over** me. (COCA)
  - b. Funny, so much water **all around** me and vet my skin felt so dry. (COCA)

-

<sup>&</sup>lt;sup>44</sup> For example, in 8 out of 9 tokens containing the word sequence [blood all around], the LMs are realized by the following noun phrases: *her, his head, him, me, him, his neck*. The same is true for the word sequence [water all around]: in 17 out of 17 sentences, the LM, if linguistically expressed, is a personal pronoun.

Therefore, the image schema underlying (87a) and (88a) could be diagrammed as in Figure 3.19, while the one on which (87b) and (88b) are based might look more like the drawing in Figure 3.20.

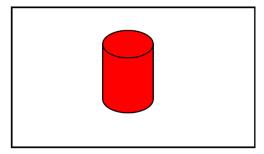


Figure 3.19 Schema of all over with threedimensional LM

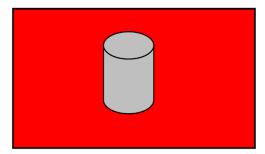


Figure 3.20 Schema of all around with threedimensional LM

This also explains why all around – unlike all over – regularly occurs with human LMs in association with abstract TRs such as death or chaos. Concepts of this type are apparently construed as sharing more similarities with substances than multiplex objects, 45 since, when used with all around as in the (a) examples below, they are not viewed as covering the (prototypically human) LM, but as surrounding it, as illustrated in Figure 3.20.

- (89) a. Even under grapeshot his laughter and pleasantries seemed to defy the death all around him. (COCA)
  - b. Pestilence's plagues have caused war and famine and death all over the globe. (COCA)
- (90) a. They chatted to each other with feigned indifference to the continued chaos all around them. (COCA)
  - b. It's total chaos all over the country. (COCA)

The (b) examples, on the other hand, demonstrate that if all over is employed with an abstract TR such as *death* or *chaos*, then the LM is usually not a noun denoting persons, but an expression, such as the globe, the world, the room, the house or the space, which is conceptualized as a two-dimensional surface (see Figure 3.18).

<sup>&</sup>lt;sup>45</sup> Notice that abstract nouns such as death, chaos, love, sadness, and happiness normally do not have a plural form, which is in accord with their unbounded and substance-like nature, while "[t]he criterion of boundedness is [...] an essential characteristic of objects and their expression as count nouns" (Radden & Dirven 2007: 64). If a noun such as love is pluralized, it goes hand in hand with a change in meaning, since, in the plural form, it is generally either used to refer to specific people, as in My loves, my children are

## 3.4.5 Cluster C

## 3.4.5.1 'Cluster' sense

While in the protoscene the entity corresponding to the TR normally adapts to the exterior boundary, i.e. the contours, of the LM, taking a ring-like form, as in

- (91) [H]e managed to untie the rope **about** his waist. (COCA)
- (92) They had tied a rope **around** her waist. (COCA)

it could also feature a multiplex TR that "reach[es] the circular *around* configuration by inward motion from all directions toward the LM" (Dewell 2007: 386), as illustrated in Figure 3.21.<sup>46</sup>

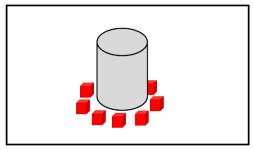


Figure 3.21 'Cluster' schema

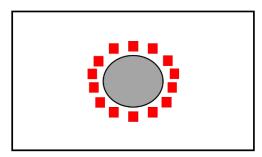


Figure 3.22 'Cluster' schema – top-down perspective

Figure 3.22 shows that, when viewed from above and from a certain distance, the several distinct entities coded as the TR appear to blend into each other. In other words, "[t]here is a point at which [the conceptualizer] cease[s] making out the individuals and start[s] perceiving a mass" (Lakoff 1987: 428). In this case, the boundaries of the individuals recede into the background and, merged together as a single entity, they are conceived as a circular line around the LM, a position that results from (implicit) previous movement as in (93) and (95), or explicit movement denoted by the verb as in (94) and (96).

- (93) He inwardly clepide the almysty Lord, in asenfisting the enemys **aboute** stondende on eche side, in the offring of the man vndefoulid. (OED) 'He called on the Most High, the Mighty One, while pressing the enemies from all directions, with an offering of a suckling lamb.'
- (94) The boys, five in number, gather **about** the fire. (COHA)
- (95) We sat **around** the fire talking of it all night. (COCA)
- (96) Alle versammeln sich **um** den Tisch und nehmen den ihnen bestimmten Platz ein. (ZEIT)

<sup>&</sup>lt;sup>46</sup> On the surface, Figure 3.22 may appear similar to Figure 3.14. However, in the 'cluster' schema, the multiplex TR moves from a place outside the LM to a position in its immediate neighborhood, so that the circular arrangement seen in Figure 3.22 is a result of that preceding action, whereas in the 'succession' schema, it is the TR itself that follows a circular path consisting of several (implicit or explicit) stations

In the examples (93) to (96), the TRs are all realized by noun phrases denoting people who due to their position – and from a specific viewpoint – are conceptualized as forming a ring around the LM, the center. However, the TR of the 'cluster' sense is not only realized by concrete tangible objects that are perceivable by the naked eye, but can also include abstract entities that metaphorically swirl around an entity, a feature that distinguishes it from the protoscene. Abstract TRs clustering around an LM can be found with both *about* and *around*, as well as German *um*.

- (97) Superstition collects **about** expensive gems as thick as rumors **around** a beautiful woman. (COHA)
- (98) Schon seit einigen Wochen ranken sich Gerüchte **um** das Karriereende des medienscheuen Topspielers. (ZEIT)

In (97) and (98), the TR is conceptualized as moving from the outside towards the LM, which is its center of attention. This clustering of different pieces of narratives around an LM might be the semantic source of the 'topic' sense, which *about* is prototypically associated with by contemporary speakers, whereas the 'cluster' meaning, both in physical oriented space and more abstract domains, tends to be taken over by *around*.

As a consequence of its age, *about* reached an even greater level of abstractness. It is also made use of by speakers, when the LM denotes an activity. If the TR is near an event-LM, it is construed as being in the process of busying itself with the action.

- (99) a. You can't ever predict the course of a criminal investigation. But we are **about** it, and -- and very aggressively. (COCA)
  - b. As soon as I get back to the U.S., I set **about** the task of getting money. (COCA)
  - c. But he is going **about** it in the wrong way. (COCA)

In (99a), which may sound archaic to contemporary speakers (OED), the LM is realized by the personal pronoun *it*, which refers anaphorically to an action in the preceding sentence, i.e. the act of pursuing investigations. Of note is that, although the main verb, with which the prepositional phrase forms the predicate, is a form of *be* (i.e. *are*), it does not seem to be construed as a state, a situation type often expressed by copulative constructions. This usage of *about* is consequently not "based on the conceptual metaphor STATES ARE LOCATIONS", which might apply to sentences such as "*We are in trouble*" or "*This is in order*" (Radden & Dirven 2007: 274). On the contrary, the following adverb phrase *very aggressively*, modifying the verb phrase, actually discloses that the situation (i.e. *But we are about it*) is thought of as a dynamic event. The subject referents are not seen as themes or experiencers but as agents, approaching and tackling the problem from all sides, a reading also invoked by the contemporary examples (99b) and (99c). However,

in (99a), dynamicity is mainly added by the semantics of the preposition *about*, a remnant of the spatial 'cluster' sense, in which (implied or explicit) movement from outside towards the center is an essential element. In the case of (99b) and (99c), the idea of a dynamic situation is strengthened and brought to the fore by the verbs *set* and *go*.

## 3.4.5.2 'Concerning' sense

It can be assumed that, out of the 'clustering' sense, *about* eventually developed the abstract sense of 'concerning', which is by far its "commonest meaning" in Modern English (Lindstromberg 2010: 141). The multiplex TR of the former, swarming and approaching the LM, can, via metaphorical extension, be related to the idea to "cover [something] from different angles" (Lindstromberg 1997: 139), i.e. to provide several pieces of information (i.e. TR) that deal with different aspects of the topic in question (i.e. the LM). However, this metaphorical sense of 'surrounding' has practically disappeared from *about's* usage range, and more and more, turns into a "bland, image free meaning, 'concerning'" (Lindstromberg 1997: 139), as a comparison of (100a) and (100b) demonstrates:

- (100) a. Urban teenagers talk **about** leisure reading. (COCA)
  - b. I think, mostly, a lot of women talk **around** a subject, rather than going directly to the center of what they really want to say. (COCA)
- (101) a. "Wir reden **über** eine EM-Endrunde mit dem Weltmeister Deutschland", sagte Kramer. (ZEIT)
  - b. Die Deutschen würden sagen: Man redet **um** den heißen Brei. (ZEIT)

The use of *about* in (100a) is "rather neutral", which might be attributed to its loss of nearly all spatial imagery (Lindstromberg 2010: 60); the implied TR (i.e. a complex of utterances) is not just proximal to the LM, as in the 'cluster' sense, but can be more or less equated with it. The TR and LM overlap, with the consequence that (100a) appears to be much more focused on the topic than (100b). The latter could be compared to the idiomatic expression *to beat about the bush*; it insinuates that women avoid moving directly to the main topic of a discussion, i.e. they avoid "get[ing] straight to the point" (Lindstromberg 1997: 140), and have the tendency to talk about a subject in an indirect way. In German, the 'concerning' sense is characteristically coded for by a different preposition than *um*, namely, the preposition *über* as in (101a). This can be taken as a clear sign that the 'cluster' sense and the 'topic' sense, its extension, are instantiated as two separate entries in the semantic memory of speakers. In (101b), on the other hand,

the use of *um* suggests that the not overtly expressed human TR takes too long before saying what he/she wants to say, that is, avoids saying something directly. This interpretation is comparable to (100b) and the English idiom *to beat about the bush*; (100b) and (101b), it seems, have more in common with the 'cluster' sense, in which the multiplex TR may be found near the LM, but the focus on it is not as strong as, for example, in (100a) and (101a).

Although *about* is undoubtedly the default preposition for expressing a 'concerning' sense, *around* may occasionally, in particular in colloquial language, also be encountered with TRs such as *discussion*, *story*, or *question*, but even in such cases, the 'clustering' configuration has not faded away completely. Yet, the singular nouns serving as TRs in (102) to (104) may signal a gradual shift from the 'cluster' schema, which is characterized by the multiplex nature of its TRs, towards a 'concerning' schema, which is considerably less rich in imagery:

- (102) [...] it didn't really take accepting him fully until his parents reached out to mine and really had a discussion **around** how culture could be saved. (COCA)
- (103) This is another story **around** the Pacific Northwest. (COCA)
- (104) The question **around** this is, what will it take to fix the parts of the voting system that are broken? (COCA)

In all three examples, *around* could be easily replaced with *about*, with the result that the *discussion, story* or *question* about a certain issue appears to be more straight to the point. To be sure, *about* seems more focused on the topic-LM than *around*, yet an even greater degree of focus on the topic is hinted at by the preposition *on*. For example, *about* collocates with the verb *talk* to code for a 'concerning' sense, whereas *on* does not. An expression such as *to talk on something* would sound unnatural to most English speakers. It seems that for *on* to prompt for a meaning 'on the subject of', the TR needs to be bounded, whilst the verb *to talk* conjures up the mental image of an unbounded flow of speech, with no clear beginning and end. It does not invoke a limited and coherent piece of speech, as, for example, implied by the noun *talk*. The process of nominalization sets off a "conceptual shift from a relational concept to a thing", also known as "reification (from Latin *res* 'thing')" (Radden & Dirven 2007: 78). It makes the act of talking appear more bounded and thought-out in (105), so that it is on a par with the TR of (106), i.e. a book:

(105) It was front page news when Monica Lewinsky recently gave a TED Talk **on** cyberbullying. (COCA)

(106) He had written a book **on** U.S. imperialism and couldn't get it published. (COCA)

Thus, if the TR is seen as bounded (e.g., a talk, a book, a speech, an essay, etc.) usually both about and on can be used, since the former has lost most of its former 'cluster' imagery. Some traces of the source sense have, however, been preserved in about's semantics, given that it is "[n]ow the regular preposition employed to define the subject matter of verbal or mental activity in a large number of verbal phrases" (OED), such as, for example, to talk, speak, think, read, write, or theorize, activities involving multiple pieces of information that are not clearly delineated from each other but appear as a mass, and not as one entity, as one thing. This is also reflected by the Oxford Collocations Dictionary for students of English, according to which all of the above verbs are frequent collocates of the preposition about, but not on. On the other hand, the semantically corresponding nouns (e.g., speech, lecture, book, thought, lecture, discussion, essay, theory) are often used with both. The difference between them lies mostly in the notion that on is seen as "address[ing] the subject" in a more direct manner than about (Lindstromberg 2010: 60). Lindstromberg (1997: 202) notes that using about in a phrase such as a theory about gravity "makes the theory sound rather wishy-washy", i.e. it seemingly has less "explanatory breadth than" a theory of gravity. He describes the difference between the two as follows:

If I think about someone – Socrates, for instance – he will figure in my thoughts, dreams, and so on, but so will other things, e.g. things he may have done, said, or believed; people he knew; Athens; and so on. And, I could think about him for a long time. But if I think of Socrates, my thinking is much more focused on Socrates himself. And my thought(s) may be fleeting. In fact, the following is rather odd: ?I thought of him for a long time. Similarly, if I have heard about someone, I can give you more information about them than if I have only heard of them, in which case all I may know is their name. (Lindstromberg 2010: 207).

Indeed, corpus data confirms that the noun *theory* combined with *about* frequently carries the notion of speculation as in (107a) and (107b), but the same is also true if it is combined with *on* as in (108a) and (108b). The preposition *of* in (109a) and (109b), on the other hand, gives an idea of completeness and adds an air of expertise, rendering it more authoritative and scientific.<sup>47</sup> Apparently, the preposition *of* suggests "that the relationship between trajectory [...] and landmark is somehow intrinsic" (Langacker 2008: 18).

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<sup>&</sup>lt;sup>47</sup> Note that one can commonly come across a combination of the noun *tale* (a story that is often made-up and hence not completely true) and the preposition *about*, but not *tale* and *on*.

- (107) a. But this is your theory **about** the cab driver? (COCA) b. Doug had a theory **about** everything. (COCA)
- (108) a. So what is your theory on why Arizona is so upset? (COCA)b. Yes, my theory on this is that you were just doing this to hype the book. (COCA)
- (109) a. My first exposure to the theory **of** evolution in sophomore biology class triggered my interest in Charles Darwin. (COCA)
  - b. This finding supports the theory **of** social learning by Bandura (1977). (COCA)

Originally, the preposition *about* has been "used to refer to the relation between a narrative and its subject", but in the course of time, "this usage has been extended beyond narratives to refer to the relation between various kinds of nouns and the things they entail", according to the *The American Heritage Dictionary of the English Language*. This order is also reflected in the semantic development of *around*. While it is increasingly encountered with TRs such as *discussion* and *story* (see sentences (102) and (103) above), other types of TRs, i.e. those of an even more abstract nature, as, for example, those illustrated in the sentences below, cannot be used with *around* (yet).

- (110) To me, they need to do something **about** the pension situation and education. (COCA)
- (111) a. He wasn't happy about what he did. (COCA)b. I'm so sad about the concert being canceled. (COCA)
- (112) As a group they regularly fretted over disciplinary decisions they had to make (interestingly, more with daughters than with sons), rarely felt totally sure of what they'd decided to do, and in several cases even lost sleep **about** it [...]. (COCA)

In (110), the TR is represented by the event described by the main clause; the subject referents are expected to implement measures in order to improve the situation in the retirement and educational system; their current, presumably disordered, state calls for changes. In (111a) and (111b), the TR is not an activity, but could be defined as a mental or emotional state. The subject referent's state of happiness in (111a), and of sadness in (111b), is brought in connection with, and related to, the LM, which denotes an event (i.e. the actions of a another person and the calling off of a concert, respectively). In fact, there seems to be a causal relationship between the two, as the state described by the main clause is dependent on the event realized by the prepositional complement, i.e. the former is caused by the latter. This cause-and-effect relationship might account for colloquial sentences such as (112), in which the preposition *about* can be replaced with the complex preposition *because of* as well as the simple preposition *over* without any noticeable change in meaning.

## 3.4.6 Cluster D

## 3.4.6.1 'Surrounding' sense

The 'surrounding' sense is a direct variant of the protoscene and, in essence, the latter's TR-LM configuration is preserved to a great extent. Note that in readings stemming from the protoscene, the TR is typically small in relation to the LM, as in (113) and (114):

- (113) And instead of a vine to wrap **around** the tree, he used a heavy chain. (COCA)
- (114) He wrapped his arms **about** her, pulling her close. (COCA)

This TR and LM organization can be considered the regular pattern for most prepositions, which is also indicated by Talmy's (1975) terminology of Figure and Ground respectively. Schulze (2009: 151) argues that "[t]he processing of prototypical orienteering patterns has the [TR] smaller than the [LM]". On top of the smaller size, "[t]he figure tends to be more conspicuous, more mobile, better delineated [...] than the ground" and consequently draws the conceptualizer's "particular attention and interest" (Radden & Dirven 2007: 28). This figure-ground alignment has been drastically reversed in the 'surrounding' sense, which may be attributed to external sensorimotor information that speakers obtain when interacting with their surroundings.

It is a fact that humans have a restricted field of vision; they can never have a full view of their environment, but only a slice of it is available to observation. Unless they move, they cannot see, for example, what is located or happening behind their back. In order to get a complete picture of their external surroundings, they need to rotate and thus describe a circular motion with their body. As a result, the external world is conceptualized as surrounding them in a ring-like fashion, which might explain why English speakers used *about*, and now use *around*, to describe such a scene, although the TR does not bear any physical likeness to the geometrical form of a circle.

Unlike in (113) and (114), where the TR can be said to have a ring-like shape, in the sentences below, the LM is not physically enclosed by the TR:

- (115) a. Menlik raised his head, surveying the land **about** them with disbelieving, contemptuous appraisal. (COHA)
  - b. The land **around** them seemed bare of anything but grass. (COCA)
- (116) a. How empty, how desolate, seems the world **about** me! (COHA) b. Your eyes are open to the world **around** you. (COCA)
- (117) Nehmt die Welt **um** euch herum wahr! (ZEIT)

In all sentences, the LM is perceived as considerably larger than the TR, which in the 'surrounding' sense is often realized by personal pronouns. He focus of the conceptualization is still on the TR, but different from the schematic structure underlying sentences (113) and (114) (see Figure 3.1), the schema behind (115) to (117) amounts to the image sketched in Figure 3.20 above, which has most likely sprung from the large difference in size between TR and LM. In the beginning, the conceptual viewpoint of which the situation is scanned might have been identical with that of the human LM as in (115), (116b) and (117), but (116a) shows that "[i]t is clearly a variable that can be adjusted in structuring any construal" (Dewell 2007: 397). Here, the conceptualizer need not be the group of people referred to by the personal pronoun *them*; it could also be some third party detached from the LM and observing the scene from another, more distant vantage point. As Dewell (2007: 397) points out, it is a "purely conceptual relation that is not necessarily linked to the location of any actual entity in the objective scene."

As can be seen from the examples above, the circular shape of the TR, present in Figure 3.1, has been lost. The TR now refers to the entire area spreading around the LM. Moreover, the diagram suggests a reversal of the Figure-Ground constellation, with the TR (e.g., *land*, *world*) serving as the background of the scene and LM as the Figure. Yet, the reference point with respect to which the TR is conceptually located remains the LM, even it is significantly smaller than the former.

While the LM in the examples (115a) and (115b) appears to surround the TR on the horizontal plane, in the samples below, it can be perceived as enclosing it from virtually all sides, irrespective of the actual form of the TR. In other words, the LM appears to be completely enveloped by the TR:

- (118) a. The scent of apples drifted in the air **about** her. (COCA)
  - b. There was nothing but complete darkness **about** us, and the night was the most horrible I ever passed. (COCA)
- (119) a. The air around me seemed to congeal and objects seemed to slow. (COCA)b. The darkness around him was soft and pleasant. (COCA)
- (120) a. Die warme, feuchte Luft **um** uns herum beginnt bestialisch zu stinken, und vom Himmel fallen dicke Regentropfen, [...]. (ZEIT)
  - b. Ich seufzte auch und starrte in die Dunkelheit um uns herum. (ZEIT)

In these cases, the TRs certainly could not be described as ring-shaped entities, since neither air, the TR in the (a) sentences, nor darkness, the TR in the (b) sentences, have

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<sup>&</sup>lt;sup>48</sup> The construction [the world around] is prototypically followed by a pronoun. As a matter of fact, personal pronouns following such a string of words account for nearly 95% of the data in the COCA. Similarly, the construction [the world about] in the COHA is in 63% percent of the cases followed by a pronoun.

any discernible shape; they are incorporeal and hence intangible, but perceivable by other senses.

If the TR is conceptualized as surrounding the LM from all directions – regardless of the form of their outer surface and whether they come into contact –, they are usually regarded as being near to each other. For instance, in the sentences under (115) and (116), the speaker refers to the land and world in the immediate neighborhood of the LM, although both TRs stretch out from the LM far more than, say, a couple of meters. In comparison with TRs of the protoscene (e.g., rope), which have clear boundaries, in (115) and (116), the size, i.e. extension, of the *land* and *world* is not clarified. Although the area is not demarcated by boundaries, it is normally understood such that the section closer to the LM is foregrounded. This might be attributed to the configuration posited for the protoscene, in which the TR does not only have, or adopt, a ring-like form, but also frequently has "a contiguity relation" with the LM, i.e. the TR either completely or partially "coincides with" the LM (Schulze 1993: 406). In both (113) and (114), for example, the TR, realized by the nouns *chain* and *arms*, respectively, adjusts to the outer form of the LM and is conventionally seen as touching it. For an entity to come in contact with another one, it has to be located in the other's immediate vicinity. Because of this arrangement, the notion of proximity might have crept into the semantics of around, which is, in particular, highlighted in the 'surrounding' sense. Therefore the diagram in Figure 3.20 might be complemented by a highlighted area extending in all directions from the LM, indicating the idea of proximity.

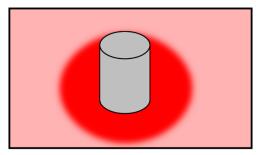


Figure 3.23 'Surrounding' schema

Multiple trajectors are then perceived as being located in the dark red section of Figure 3.23, viz. as being in the near neighborhood of the LM. Hence, different from the 'cluster' sense (see Figure 3.21 and 3.22), in which the TRs are assumed to be arranged in a circle around the entity, in the 'surrounding' sense, the arrangement of the multiple TRs – if circle-like or not – does not play any role at all. In lieu of this, it emphasizes their proximity to the LM. It expresses "'randomly distributed location", "as opposed to encircling location", as noted by Lindstromberg (1997: 138), yet with the important

addition that they are randomly strewn somewhere within the neighborhood of the LM (i.e. in the dark red section of Figure 3.23). Also, different from the 'here and there' sense, the random location of the TR is not in focus here, but its closeness to the LM,<sup>49</sup> as evidenced by (121) to (123):

- (121) Was there nobody else who had moved into any of these houses **about** here lately? (COHA)
- (122) We wanted people to feel just as good as the people living in two-and three-family houses **around** here. (COCA)
- (123) Sie schwenkten weißrussische Fahnen und riefen "Lang lebe Weißrussland!" In den Straßen **rund herum** waren schwer bewaffnete Sicherheitskräfte in Alarmbereitschaft. (ZEIT)

Conventionally, the interpretations of (121) and (122) would not necessitate a ring-like arrangement of the multiplex TR (i.e. houses) around the LM (i.e. here), which coincides with the speaker's momentary position. So, the buildings referred to are the houses which are nearby from the speaker's perspective. Correspondingly, in (123), the speaker refers to the streets that are proximal to the place where the event – described by the preceding clause – takes place. In German, this kind of meaning is conveyed by *rund herum*; as with many meanings, the preposition um itself is not sufficient. By using the adjective umliegend 'surrounding', with um as a prefix, example (123) could be paraphrased as In umliegenden Straßen schwer bewaffnete den waren Sicherheitskräfte Alarmbereitschaft.

Although the TRs in the instances above are all plural nouns, thus denoting several entities, they do not necessarily surround it in a circle as in the spatial 'cluster' sense. The replacement of the 'circle' schema by the notion of proximity becomes specifically apparent in the following sentences, which rule out readings similar to (94) and (95). The uniplex nature of the TR in the sentences under (124) and (125) would make even the necessary multiplex-to-mass transformation impossible:

- (124) a. They suppose he buried it **about** here somewhere, or hid it in some rock. (COHA)
  - b. She's got to be **around** here somewhere. (COCA)
- (125) a. It's still early. But there's almost nobody about. It's so silent. (COCA)
  b. I hope you don't mind that I took a doze in your barn, but there was nobody around to ask. (COCA)

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<sup>&</sup>lt;sup>49</sup> As regards spatial readings, the 'surrounding' sense may share with the 'here-and-there' sense the random distribution of the TR, but they are grounded on two different schemas. Comparing Figure 3.16 against Figure 3.23 shows that in the 'here-and-there' sense, the TR is encompassed by the LM, which in turn is conceptualized as a large horizontal plane. Because of the TR's inclusion in the LM, there is no need for *about* or *around* to highlight their proximity to each other, as this is self-evident.

Transitive *about* and *around* in (124a) and (124b), respectively, imply uncertainness regarding the exact direction of the TR, but their semantics indicate that it could be somewhere close to the LM. In the case of intransitive *about* and *around* in (125a) and (125b), the TR is seen as close to the speaker's standpoint, which acts as a substitute for the missing LM and serves as the reference point, with respect to which the TR is positioned. This physical proximity between TR and LM has eventually been imposed on more abstract situations, to express different kinds of closeness, regardless of whether the TR is multiplex as in (126a) and (127a) or uniplex as in (126b) and (127b). The (c) examples demonstrate that the same is valid for German *um...herum*.

- (126) a. He spoke boldly, but his wife's question had unnerved him, for he had a soft heart, and liked people **about** him to be happy. (COHA)
  - b. And the reason why you continue on is because you have the support of people **around** you. (COCA)
  - c. Aber ich habe Leute **um** mich **herum**, die Geduld haben und an mich glauben. (ZEIT)
- (127) a. He had always been **about** her, a large boy, of the age of her brother Nat. Growing up, he had been rough, and she had run away from him, but after he was grown he had become gentle. (COHA)
  - b. And once you've been **around** the man for awhile, you'll understand what I'm talking about. (COCA)
  - c. Meinen Sie etwa, Herr Hörster, wenn Sie bei den Betriebsfeiern dauernd um den Chef herumtänzeln, erreichten Sie von dem mehr als die anderen Firmenangehörigen? Im Gegenteil! Der kann das gar nicht ausstehen, wenn jemand immer **um** ihn **herum** ist. (Schemann 2011: 343)

The TRs in the sentences above are most likely not even physically proximal to their LMs at the moment of speech, which is also indicated by the use of the past tense form in (127a) and the hypothetical construction in (127b) and (127c). The people standing for the TR do not have to be present at all, when the sentence is uttered, since what is meant is social closeness. For example, in (126a), the people around the human LM are persons whom he has more or less regular or close contact with and whom he holds dear. A similar reading is prompted by (126b) and (126c), as people who help out in times of trouble or personal crisis are usually friends and/or family members.

'Being about her' in (127a), 'being around the man' in (127b) and 'um ihn herum sein' in (127c) all equate to spending time with that particular person socially, to associate with him/her over an extended period of time. Therefore, the subject referent of (127a), the man, could, in connection with the adverb *always*, be considered a childhood friend of the woman. In (127b), the speaker recommends the addressee to be in the vicinity of the man, in order to get to know him better, to become familiar with his faults and merits,

hinted at by the subordinate clause *what I'm talking about*. In (127c), the person denoting the LM (i.e. *ihn*) absolutely dislikes having to deal and converse with people during a party. In refusing to engage in small talk, he refuses to build personal relationships and social ties with his employees.

#### 3.4.6.2 'Feature' sense

The notion of proximity, which became privileged in the 'surrounding' sense, might have led to what will be called the abstract 'feature' sense, nowadays fully conventionalized with *about*. <sup>50</sup> Initiators of the 'characteristic of' sense were conceivably sentences as the following:

- (128) a. There was **about** the man a flavour of chivalry and adventure which made him more like a knight of the middle age than a soldier of the prosaic nineteenth century, [...]. (COHA)
  - b. He had an authority **about** him that made Pilate feel somehow small and inadequate. (COCA)
- (129) I feel comfortable with what I'm doing the easier it is to have an air of confidence **around** you and relay that to other people. (COCA)
- (130) Man verehrte Goethe, aber **um** ihn war auch immer eine gewisse Kälte, Arroganz und Steifheit, mit der er sich allzu kollektiven Gemeinschaftsfreuden entzog. (ZEIT)

A TR that is thought of as being continuously in close proximity to the LM, can be reanalyzed as its accompanying feature. According to Radden and Dirven (2007: 279), "[i]t is easy to trace a connection between location and possession: situations in which objects are always or often close to a person invite the implicature that they belong to that person". Hence, the TRs of both (128a) and (128b), i.e. *flavor of chivalry and adventure* and *authority*, are normally considered to be constant properties of their respective LMs, and not as something that is only temporarily pertaining to them. Sentence (129) shows that *around* appears to develop in the same direction: in the speaker's opinion, *confidence* should become a fixed attribute of people who are in the limelight. Similarly, in the German sentence (130), where *um* indicates proximity, the abstract concepts coldness, arrogance and formality (i.e. the TR) are personified and seen as longtime companions of

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<sup>&</sup>lt;sup>50</sup> Surprisingly, Lindstromberg (1997), who did a comprehensive review of the most contemporary senses associated with *about*, does not make mention of the 'feature' meaning, despite the fact that it commonly figures as a subentry in dictionaries (e.g., *PONS Groβwörterbuch Englisch* 2014).

the German writer (i.e. the LM); in other words, he was considered to be cold, arrogant and strictly formal in his demeanor.

The 'surrounding' schema, from which the 'feature' sense assumedly evolved, is clearly present in (129), and somewhat less perceptible in (128a) and (128b). The TRs flavour of chivalry and authority could be likened to air and darkness in (118a) and (118b), i.e. formless entities wrapped around their LMs – however, the former constantly, the latter only temporarily. The link between the 'surrounding' sense and the 'feature' sense is not so obvious with other kinds of TRs such as, for example, the noun way in (131) or the relative word what in (132). Note that it would be extremely unusual to use around in these sentences; (129) shows that the 'feature' sense might be emerging, but it has not yet reached the degree of abstractness about has in (131) and (132).

- (131) Drexel loves people and has a way **about** him that people love. (COCA)
- (132) This was what she hated **about** actors you could never tell when they were acting. (COCA)

The main verb *has* in (131) activates, in interaction with the transitive construction, a "possession schema" that "describes a relation between a possessor and a theme" (Radden & Dirven 2007: 279), i.e. between *Drexel* and the noun phrase *a way about him that people love*. The thing possessed is a type of behavior exhibited by Drexel of which people around him seemingly heartily approve. That this conduct is typical of him, forming an integral part of his personality, is underlined by the preposition *about*. In (132), the TR is realized by the word *what*, which "represents a 'fusion' of the NP *the thing* and the relative pronoun *that*" (Collins & Hollo 2010: 133). *About*, then, indicates that the thing that she mostly dislikes about actors is regarded as a personality trait of that profession in general. She does not dislike actors, but this certain characteristic she ascribes to them. Here, it is only *about* that sets off the possession schema between the possessor, coded as prepositional object, and the possessed thing, coded as the subject of the matrix clause, i.e. *this*, which in turn has cataphoric reference to the dislocated element *you could never tell when they were acting*.

## 3.4.6.3 'Approximation' sense

The static TR-LM configuration of the 'surrounding' sense in combination with the notion of vicinity might have given rise to yet another meaning contemporary speakers associate with *about* and *around*, namely, the well-known temporal approximate sense.

In contrast to the spatial equivalents illustrated in (115a) and (115b), this meaning is also regularly coded for by Modern English *about* in seemingly all contexts and genres.

- (133) a. Last night, **about** midnight, my telephone rang. (COCA) b. We arrived at the campsite **around** midnight. (COCA)
- (134) When the store closed at midnight, he offered me beer. (COCA)
- (135) a. Um Mittag herum wären sie noch alle obendrauf gewesen. (ZEIT)
  - b. Um circa 10.35 Uhr hörten wir die vielen Helikopter. (ZEIT)
  - c. Die Maßnahme wurde um Mitternacht in Kraft gesetzt. (ZEIT)

About in (133a) and around in (133b) may invoke almost the same image, albeit the former less strongly. With both, the LM is bracketed from all directions, meaning that with LMs of time, the notion of 'approximation' could be both 'maybe before' and 'maybe after', thus contrasting with sentence (134). However, in (133a), the TR seems to be closer to the LM than in (133b); in other words, about might indicate a closer margin, that is, it might be more exact than around. German um can also be used for temporal approximation but only when used together with the adverb herum, following the LM, as in (135a) or with the adverb circa, preceding the LM, as in (135b). Without them, the notion of approximation is completely lost and it actually expresses the opposite: exactness. So, while the schema of (135a) and (135b) can be compared to that of (133b), sentence (135c) is more reminiscent of (134). The English about is apparently farther along the continuum than around, moving away from rough approximation to close approximation and toward accuracy.

According to Lindstromberg (2010: 142), *about* is the first choice for coding 'approximation'. However, if the approximated LM is a point in time, the historically earlier *around* has become a serious rival to *about*, especially in cases where a rough estimate is sufficient. There are, for example, nearly 411 tokens for the construction [around midnight] in the COCA, as opposed to 168 tokens for [about midnight]. Additionally, Figure 3.24 shows that the overall frequency<sup>51</sup> of the word sequence [about midnight] has gradually decreased from 1.81 in 1830 to 0.3 in 2000, whereas [around midnight] has experienced a slight increase within the same time period, rising from 0.00 to 0.78 (see COHA). The same pattern can be observed for most time-LMs such as *noon*, *midday* or exact times (e.g., 9 o'clock).

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<sup>&</sup>lt;sup>51</sup> Note that 'frequency' = frequency of that construction per million words for that decade.

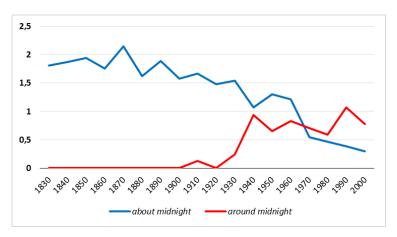


Figure 3.24 about midnight vs. around midnight (1830-2000)

The use of *about* with LMs constituting a point in time may experience a decrease, but it is increasingly employed with quantificational complements, i.e. LMs denoting a certain amount or quantity. Conceptually, the sentences (136) and (137) are nearly identical, but there is an obvious difference in use.

- (136) He went in there, and **about** 10 minutes later he had the job. (COCA)
- (137) The trip is supposed to take **around** 10 minutes. (COCA)
- (138) Bei unseren Probanden waren es meist **um** die 30 Minuten. (ZEIT)

About has long been used in cases such as (138), but its use has experienced a remarkable increase within the last decades. For example, Figure 3.25 illustrates that the overall frequency of the construction [about mc\* minutes] in the COHA has drastically risen from 2.49 in 1830 to 27.73 in 2000;<sup>52</sup> [around mc\* minutes], on the other hand, was first recorded in the 1940s, where it amounted to 0.04 and since has slightly increased to 0.14 in 2000. Correspondingly, in German, the addition of herum or circa, is not required to express an approximate sense if um is used with "quantifiable" entities as in (138) and not a point in time as in (135a) and (135b).

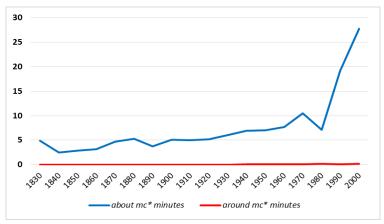


Figure 3.25 about mc\* minutes vs. around mc\* minutes (1830-2000)

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<sup>&</sup>lt;sup>52</sup> The abbreviation mc\* stands for the category of cardinal number.

In spite of the different nature of the LMs, with respect to the underlying schema, (136) and (137) can be considered relatively similar to (133a) and (133b) above. The notion of 'maybe before' or 'maybe after' (e.g., *midnight*) is supplanted with the closely related concept of 'maybe less' or 'maybe more' (e.g., *minutes*). However, consider the following sentences:

- (139) A pack that weighs one-quarter of your body weight is **about** the limit a fit man can comfortably carry. (COCA)
- (140) That's \$2,000, **about** enough to cover a few weeks at the nursing home. (COCA)

In (139), the statement made by the speaker is only valid on condition that the TR does not significantly exceed the given amount. In other words, if it weighs slightly more than *one-quarter of your body weight*, it might still be acceptable, but if it weighs considerably more, the pack cannot be carried comfortably. Similarly, the amount of money specified in the main clause of example (140) is barely sufficient to pay the costs for the nursing home. A sum that is slightly below the limit (i.e. \$2,000) might still be enough to cover the expenses; two, three hundreds of dollars less than the limit would already make a sharp difference so that the costs of the nursing home most probably cannot be met.

Truthfully, in both (139) and (140), *about* expresses approximation, but different from (133a) and (136), the co-text makes it clear that the situations described require accurate approximation: the TR constitutes more or less the limit, i.e. the LM. This might also explain why *around*, which still has a comparatively strong circle image inherent in its semantics and hence a lower degree of exactness, cannot be used in (139) and (140); it can only be recruited in instances where the circular image is, to some degree, applicable, i.e. where a greater margin is acceptable.

#### 3.4.6.4 'Intention' sense

In comparison with *around*, which, it seems, has just entered the first phase of the 'approximation' sense, the very close proximity conveyed by *about* in (139) and (140) above has most likely been extended to LMs of a completely different kind, i.e. LMs realized by infinitival clauses which describe entire actions or events. This extension "reflects the possibilities of ontological metaphorization: [a]ctions or events now take on a more 'substantial' character" (Schulze 1993: 407). The TR, prototypically the subject

referent, approaches the action denoted by the LM until he/she is on the verge of performing it.

- (141) What I am **about** to give you is very old but very precious. (COCA)
- (142) The state is **about** to run out of number and letter combinations for license plates. (COCA)

In contemporary colloquial English, *about* combined with a *to*-infinitive clause, as in (141) and (142), has become a popular way of referring to the future, especially if one wants to convey immediacy, that is, that the situation described by the non-finite clause is going to happen in the near future. For example, in (141), the transfer of the object most likely takes places shortly after the speaker uttered the sentence. According to the OED, a combination of *about* "with the infinitive [...] has the force of a future participle, analogous to *going* in *to be going to*", with the difference that "[t]he immediacy is usually greater with *about to* than with *going to*". This can be seen by contrasting (141) against (143), whereas the sentences under (144) show that that the form of the former is not as fixed as that of the latter. The 'intention' sense might have started off with copular *be*, but, now and then, it also occurs with other common copular verbs such as *look*, *seem* or *appear*:

- (143) As a matter of fact, I'm going to give you my number. (COCA)
- (144) a. She seemed **about** to speak, but Abby cut in. (COCA)
  - b. The attendant looked **about** to say something more, but then thought better. (COCA)
  - c. Above, the huge omnibusses of cumulus clouds appeared **about** to collide but the spaces between them never varied. (COCA)

Despite these differences, the constructions *about to* and *going to* have a significant feature in common: the notion of 'intention'. While one could argue that the 'approximation' schema can be detected in (141) and (142), it apparently has been overlaid with the notion of intention in the negative construction in (145):

(145) He'd come this far and was not **about** to leave without speaking to his friend. (COCA)

(145) could, without problems, be paraphrased as *He did not intend to leave without speaking to his friend*. The TR, i.e. *he*, is not understood as being near the event described by the *to*-infinitive clause, i.e. as being close to leaving without having spoken to his friend – on the contrary.

Taking into consideration diachronic data, it becomes clear that the notion of immediacy, subliminally present in the positive construction *to be about to*, has preceded

the notion of 'intention', which is prevalent in negations; the notion of immediacy, in turn, is most likely an extension from the approximative meaning with quantities.

- (146) Man sloh ðær mycel wæl **abutan** feower hund manna oððe fife. (OED) 'A major force was slain there – about four or five hundred men.'
- (147) Oure enmy will noght suffer us to be in rest when we slepe, bot þan he es **aboute** to begyle us..with faire ymages, fayre syghtes. (OED)
- (148) The Queen seeing the King was not **about to** Return, try'd a new to perswade him to it. (OED)

Example (146) shows that already OE *abutan* was capable of expressing approximation with numbers. A weak notion of 'immediacy' began to appear during the Middle English period, while the notion of 'intention', nowadays conventionally associated with the phrase *to be about to*, came into use at the turn of the 17<sup>th</sup> century, as shown in (147) and (148), respectively.

*Be about to* does not exactly have a counterpart in the German language, but in terms of conceptualization, one feels inclined to draw a parallel to the subordinator *um*.<sup>53</sup> Take a look at the following sentence:

(149) Mit 18 Jahren kam sie in die USA, **um** zu studieren. (ZEIT)

In using *be about to* in English (see sentence (141)), the TR is normally a human being designated by a (pro)noun or proper noun, whereas the LM is an event that has been granted ontological existence, a conceptual shift often referred to as the "ontological metaphor"; this type of metaphor "allow[s] us to understand events and states in terms of things", as Radden and Dirven (2007: 78) put it. On this account, in using the subordinator *um* in (149), the German speaker adds an additional layer of abstractness, given that the main-clause event as well as the subordinate-clause event are reified, i.e. turned into things. The former stands for the TR, the latter for the LM, in whose neighborhood the TR is located. More specifically, the act of moving to the United States is done with the intention to attend a university there. The process of immigration makes it possible to be in the immediate area of the LM (i.e. going to an American college).

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<sup>&</sup>lt;sup>53</sup> Huddleston and Pullum (2002: 58), for example, radically depart from traditional conceptions of the category of prepositions by allowing any type of clause as complement; they thus redraw the boundary between prepositions and subordinators.

## 3.4.6.5 'Active' sense

The notion of proximity of the 'surrounding' sense used in conjunction with intransitive *about* and *around* (see sentences (125a) and (125b)) might also be the treated as the source for the abstract meanings expressed by them in the following examples:

- (150) a. On Hampshire estate, the mill has been **about** for upwards of two weeks, making eight hogsheads per week, at an average of 51. per hogshead, including all expenses, [...]. (1839, GOOGLE-US)
  - b. However, terrorism has been **about** for centuries. (2006, GOOGLE-US)
- (151) a. The healthcare model has been **around** for a while, and what we have isn't working. (COCA)
  - b. But obviously Beck has been **around** for years and years. (COCA)

What all of the sentences have in common is that about and around encode different types of 'activity'. In (150a), the TR, i.e. the mill, is not conceived of as being physically proximate to the speaker's viewpoint. Intransitive *about* here rather indicates that the mill is in active operation, a reading which is also supported by other sentential elements: the following prepositional phrase, for upwards of weeks, gives information about the timespan during which it has been used, while the following subordinate clauses comment on the results achieved during this time period. The TR's spatial location, more specifically, whether it is in the vicinity of the speaker, does not play any role. The TR in (150b), i.e. terrorism, for example, is an abstract entity, which is said to have been in existence for a long time. Even if the speaker has concrete attacks in mind, and not the abstract concept, the temporal adjunct for centuries makes it clear that he or she does not only refer to those which happened recently, i.e. in the speaker's time. What cannot be denied is the focus on present relevance, which is attributable to the notion of proximity of the source sense, but also, to a considerable degree, to the use of the present perfect form. Sentence (150b) refers to a period starting in the past and leading up to the moment of speech. The same can be said about the examples with intransitive around: the healthcare model in (151a) has been in use for some time up to the moment of speech, and Beck in (151b) has been working in the business for the last couple of years. As with (150a) and (150b), the relevance to the present time is, to a great extent, indicated by the present perfect form, but the notion of 'activity' associated with the TR is coded by around. Thus, with regard to meaning, about and around in (150) and (151), respectively, share striking similarities, but the latter has become the norm in contemporary colloquial language.

In some way, the 'active' sense seems to be a blend of properties displayed by the 'surrounding' sense and the 'feature' sense. As pointed out, for the formation of the novel

use, the proximity notion of the 'surrounding' sense might have been a decisive factor: if an entity draws the attention of the conceptualizer on a regular basis, continuously coming into, and disappearing out of, focus, it might, in due course, be correlated with the idea of 'activity'. On the other hand, it resembles the 'feature' sense in that the TR's activeness is usually not conceptualized as a phenomenon of short duration, but as lasting for a longer period of time, which is often – but not necessarily – linguistically expressed and more precisely specified by following prepositional phrases (e.g., *for centuries, for a while, for years and years*, etc.).

#### 3.4.7 Cluster E

## 3.4.7.1 'Rotation' sense

Both *about* and *around* can be used to describe a rotation of the TR around its own center, a movement that human beings, due to the intrinsic limitations of their visual field, often need to perform lest they want to have a better view of their surroundings. The entity serving as the LM "is not an external one, but part of [the TR] itself" (Schulze 1993: 408), i.e. "what the [LM] must be" is the "center of rotation" (Lindstromberg 2010: 135), represented by the black circle in Figure 3.26.

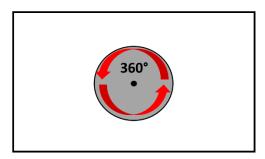


Figure 3.26 'Rotation' schema

Yet, comparable to the 'circumvention sense', where partial circular movement outweighs full circular movement, a complete rotation, i.e. the TR turning around until it points in the same direction again, as exemplified in (152) and (153), is undoubtedly possible, but definitely not the most frequent configuration, especially not for *about*.

- (152) As it reached the ducks, they spun **about** like weather cocks on the water, and went up into the air and away out of danger. (COHA)
- (153) Watch got in at once, sniffed in every corner, turned **around** three times, and lay down. (COCA)
- (154) Tonbandspulen drehen sich links herum. (ZEIT)

The comparison of the ducks (i.e. the TR) to the weathercocks in (152) clarifies that *spun about* expresses several full rotations, whereas in (153), this is communicated by the adjunct *three times*. In the German example (154), it is world knowledge about audiotape reels that prompts for a 360° reading.

Used with verbs such as *turn* or *spin*, *about* and *around* often suggest a rotating movement performed by the TR, so that one might conclude that this is expressed by the verbs and not by the prepositions. The following example shows that this does not have to be the case:

## (155) The hair was turned **about** his fingers. (COHA)

The TR, *the hair*, did not rotate around its own axis, but was wrapped around the LM, adjusting its shape to the latter's boundaries. Another piece of evidence that *about* here invokes the protoscene, and not the 'rotation' sense, is that the LM, i.e. *his fingers*, is not embedded within the TR as in (152), but a separate and independent entity.

Apart from certain contexts, human TRs are not often required to rotate on the spot unless, as already pointed out, they wish to inspect their immediate surroundings (Lindstromberg 2010: 136). This might explain why the full 'rotation' meaning for both *about* and *around* is largely found in relation to sight, as in the sentences below, which prompt for readings that are seen "as derived from the ['rotation'] schema with the entire body in motion" (Schulze 1993: 412).

- (156) a. He looked **about** for the spot where the cave should be. (COCA)b. He looked **about** the room, at the television, the dresser, the window. (COCA)
- (157) a. I looked around for a place to hide. (COCA)b. While we ate, she looked around the cafeteria slowly, studying faces again. (COCA)

The 'rotation' sense with figurative motion can have an external LM as in the (b) examples, but does not necessarily need one as shown in the (a) examples. Where the search is taking place in (a) has to be deduced from the context. For example, sentence (157a) on its own offers almost no clues to the whereabouts of the TR; the subject referent might be looking for a hiding place outdoors or within an enclosed space such as a room. Although the TR could make full rotating movements in all examples above, it is not the only option available. Especially, with verbs such as *look*, it might be difficult to determine the exact movement carried out by the TR (OED), without further contextual cues. Consider a sentence such as *She looked around the shop*, which, in isolation, is even slightly more ambiguous than *She walked around the house*, discussed in section 3.4.4.2.

In addition to the protoscene (e.g., She is outside and walks around the shop in a circle, searching for something), the 'circumvention' sense (e.g., The shop blocks her view and she wants to take a peek at what is behind it), the 'here-and-there' sense (e.g., She is inside the shop, leisurely moving from shelf to shelf), the sentence can also evoke a 'rotation' sense: full rotation (e.g., She makes a complete turn inside the shop, inspecting the walls) or partial rotation (e.g., She is seated, while observing the people around her), in the latter of which the fictive path covers only fragments of a circle.

## 3.4.7.2 'Opposite' sense

A special type of partial rotation, that is, to rotate by roughly 180 degrees so that one faces in the opposite way, is commonly coded by *about* and *around*. It can be self-initiated as in (158a) and (159a), or externally-triggered as in (158b) and (159b):

- (158) a. She spun about and raced back to her sister. (COHA)b. But, the moment she turned the car about and succeeded in heading it in the opposite direction, the instant she realized [...] (COHA)
- (159) a. Halfway down the block I turned **around** and looked back. (COCA) b. He turns the car **around**, and drives back toward the highway. (COCA)
- (160) Er trinkt das Glas in einem Zug aus, dreht es **um**, lässt den letzten Tropfen auf seinen Daumennagel rinnen [...]. (ZEIT)

The TR in the sentences under (158) and (159) is normally not interpreted as being in "constant and circular movement, but, at most, in semicircular movement" (Schulze 1993: 409), an assumption corroborated by the word *back*, used in the following main clauses. In (160), the glass does half a turn, otherwise the drop could not run down the glass and land on the subject referent's finger. So, the adverb *back* in the English examples and world knowledge in the German example make it clear that the path followed by the TR describes only a semi-circle, i.e. a 180 degree rotation, as illustrated in Figure 3.27, a configuration which, as an extension of the full 'rotation' sense, does not require an external LM.

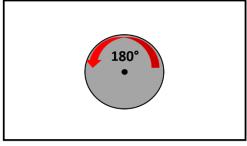


Figure 3.27 'Opposite' schema

In the case of *about*, this sense even goes back to the Old English period and it, consequently, preceded the searching implied in the sentences (156a) and (156b) above, which only came into use around the beginning of the 14<sup>th</sup> century (OED).

The schema underlying the sentences (158a) and (159a) has divided the conceptual space into a front and a back area, since in order to see what is behind their back, both subject referents (i.e. *she* and *I*) need to perform a rotating movement with their body. In analogy to the 'circumvention' sense (see Figure 3.12), the front area is 'visible' and 'old', in the sense that it stands for given information, the back area is 'hidden' from view and 'new', in the sense that, once one performs the necessary movement, it offers new information.<sup>54</sup> This division into two opposite spheres has then been imposed on more abstract areas:

- (161) Last year, Americans spent \$2.1 billion on bottled water and \$450 million on home treatment systems. At the heart of those two booming industries looms a question: Is my water safe? Experts turn the question **around**, wondering if people who buy bottled water are easily frightened. (COCA)
- (162) In this case, of course, he's turned **around**; he's still a Democrat, but he is very much against John Kerry and very much in favor of the current George Bush. (COCA)
- (163) When these words were spoken, I was turned **about**....[W]ith them a divine power of reconciliation so filled my heart, that all was peace. (GOOGLE-US)

In (161), American citizens worry about the quality of the water. This question (i.e. the TR) is countered by experts by another question, i.e. whether people concerned about the safety of the water might not just be easily frightened, which offers a new perspective on the situation. In (162), the subject referent, the TR, has somewhat strayed from his old way of thinking (Democratic) and is now leaning towards a new political direction (Republican). What *around* expresses is ultimately the human TR's change of mind and, as such, can be compared to sentence (41b), which, as shown above, derives from the 'appearance' schema (see section 3.4.3.2). In the following sentence, however, it might not be possible to decide whether it is based on a schema akin to that of (41b) or (163).

(164) I was beginnin' to talk her **around**, make her think the Irish weren't all bad, and maybe I was good enough for her precious daughter. (COCA)

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<sup>&</sup>lt;sup>54</sup> For more abstract domains, a mere division into ,front' and ,back' is insufficient. Schulze (1993: 411), for example, remarks that for the sentence "Since the last election public opinion has swung round completely on the question of allowing heavy traffic into the centre of cities", it is questionable whether the abstract TR public opinion is conceptualized as a body with a 'front' and a 'back'. However, a correlation of 'front' with 'old', and of 'back' with 'new' might provide an adequate answer to the problem.

Again a change of mind undergone by the TR is implied, but due to the verb *talk*, which different from verbs such as *bring* or *turn* does not usually express any kind of physical movement, the schematic structure remains in the dark. On the whole, it is not even necessary to decide which of the two image schemas, Figure 3.12 or Figure 3.27, underlies sentence (164), since one and the same meaning could stem from two separate conceptualizations of the situations (Tyler & Evans 2001: 575; De Mulder & Vanderheyden 2002: 188).

The division into 'visible' and 'hidden' areas, i.e. between 'old' and 'new', can be taken further so that one of them, i.e. the latter, is seen as 'better'.<sup>55</sup>

- (165) The thing that has turned the situation **about** and made our production start to climb, though it be ever so slightly, has been the fact that the prospect for a profit has encouraged people to invest their money into this business. (*Congressional record* 1974: 3218)
- (166) a. It's time to turn the situation **around**, to recover the centrality of undergraduate education. (COCA)
  - b. He was brought in by the board to turn the company **around** and improve sales and grow the company," Holland said. (COCA)
  - c. Perry has turned the game **around**, and football fans everywhere are watching and enjoying this. (COCA)

The situation, the TR, in (165) is described as heading toward a new direction, a step that already yields modest improvement – an increase in level of production can nearly always be taken as a good sign. A sense of improvement can also be detected in the sentences using around: the verb recover in (166a), the verbs improve and grow in (166b), and the verb enjoy in (166c) all carry positive connotations, suggesting that the 'turning around' was for the better. However, sentences like these are, at the moment, largely restricted to spoken language. For example, the construction [turn\* the economy around] is mostly used in spoken genres and, to some extent, in newspapers, which provide daily reports on the market system of a country. It is also a rather recent development. In total, there are only four tokens in the COHA, the earliest of which is from the 1970s. Since then, the overall frequency of [turn\* the economy around] has gradually increased from 0.16 in 1990-1994 to 0.29 in 2010-2015 (see COCA). Once again, it can be observed that a sense, at one time frequently used with about, is taken over by modern around.

<sup>&</sup>lt;sup>55</sup> The association of 'new' with 'better' is everyday wisdom. An "appeal to novelty" is, for instance, often found in advertising (Bowell & Kemp 2015: 47).

— Winston S. Churchill

# 4 Predictable prepositions?

Personal struggles with prepositional systems of various languages, a growing dissatisfaction with traditional approaches to prepositional meaning, and the reluctance to accept that the array of meanings associated with prepositions amounts to nothing more than pure coincidence were the main driving forces behind the present thesis. Using concepts and insights developed within the Cognitive Linguistics paradigm, it, first of all, has confirmed that the relations between the senses once, and still, coded for by the prepositions *about* and *around* are by no means arbitrary and unmotivated, as has traditionally been claimed, but can be explained in a principled fashion. It has been demonstrated that all of their meanings form a radial category, comprising a primary sense (the protoscene), around which all extensions are systematically organized. Extensions which are closely related to the protoscene, i.e. its direct variants, tend to be of a more spatial nature and retain most properties of their source form. Conversely, those which are further away from the center are characterized by a higher degree of abstractness

In line with cognitive linguistic assumptions about word meaning, two key criteria were of special importance in uncovering the systematicity behind *about's* and *around's* semantic extensions: humans' daily experience of the spatio-physical world and the context in which sentences are uttered. In principle, each of the five direct variants of the protoscene, which themselves generated a cluster of senses, preserved the basic TR-LM configuration, in which the circle image is the most dominant component; highlighting, however, certain aspects arising from that TR-LM arrangement, while backgrounding others. In cluster A, for instance, the notion of a relatively large LM blocking the path and concurrently the view of the TR (and the conceptualizer) has become salient and was crucial in spawning the 'appearance' sense and the 'on-the-other-side' sense. For the creation of cluster B, the idea that the TR moves along a circular path consisting of stations that need to be traversed was essential. While the circle schema gradually became lost, the concept of the stations remained an integral part of the 'here-and-there' sense and the 'covering' sense. Cluster C was initiated by focus on a multiplex TR moving from the outside towards an LM, adapting to its boundaries, which resulted in complete overlap in

the 'concerning' sense. On the other hand, the notion of proximity, central to cluster D, played a fundamental role in bringing about a number of rather abstract uses: the 'feature' sense, the 'approximation' sense', the 'intention' sense and the 'active' sense (the first three of which are key senses in *about's* synchronic network). The final cluster, cluster E, represents a shift from the protoscene in that the TR does not move in a circle around an external entity, but rotates about its own center; a half-rotation led, then, to the establishment of the 'opposite' sense.

The investigation of *about* and *around* has, furthermore, uncovered that the protoscene of a preposition, which may have served as an impetus for all the other derived senses, does not necessarily correspond with what contemporary language users view as its prototypical meaning, as predicted by previous prepositional analyses (e.g., Brugman 1986; Lakoff 1987; Dewell 1994). It could be applicable to very new prepositions such as *around*, whose contemporary prototypical meaning might coincide with the protoscene. The analysis of *about*, however, has made evident that the abstract 'topic' sense and the 'approximation' sense – possibly its commonest meanings in Modern English – could not have provided the TR-LM configuration for its synchronic spatial uses (e.g., 'here-and-there' sense or 'opposite' sense). To reveal the systematic relationships holding between *about's* contemporary uses, it is necessary to study it diachronically, starting from its earliest attested meaning.

From a synchronic perspective *about* and *around* might, at first sight, not have much in common, given that the synchronic semantic network of *about* comprises mainly highly abstract usages, whereas the spatial uses have fallen into disuse to a large degree, especially in colloquial language. A diachronic comparison of *about* and *around*, on the other hand, is able to reveal the close affinity between them. In essence, they seem to have undergone almost the same semantic development, that is, they developed nearly the same sense, but at staggered times over the centuries. Indeed, a large portion of the semantic territory once controlled by *about* (e.g., protoscene, 'circumvention' sense, 'succession' sense', 'cluster' sense, 'surrounding' sense, 'rotation' sense,) has been progressively conquered by the historically earlier *around*. In short, *about's* past is *around's* present, and *about's* present could be *around's* future.

Another aim of the study was to show the benefits of cross-linguistic comparison for the analysis of prepositional meaning. On the one hand, it was helpful in distinguishing the distinct senses and determining their order of emergence; on the other, it brought to light that semantically related German *um* does not only share a similar protoscene, but

also has gone through similar semantic changes. Excluding the 'active' sense, it can prompt for nearly all meanings identified for *about* and *around*. For this reason, it might not be too far-fetched to speculate that semantic equivalents in other languages and language families have expanded their usage potential along the same lines, with the proviso that they originate in a protoscene akin to that of *about*, *around* and *um*.

A circle schema as the protoscene can, for instance, be posited for the Latin preposition circa with reasonable certainty. According to the *Thesaurus Linguae Latinae*, it is a derivation of the preposition circum, which in turn has evolved from the accusative form of the noun circus 'circle'. Moreover, Latin dictionaries such as the *PONS* (Hau 2007) reveal that the closely related prepositions circa and circum coded for many of the meanings represented in about's and around's network: the 'succession' sense (concursare circum tabernas), the 'surrounding' sense (omnia templa, quae circum forum sunt), the 'rotation' sense (terra circum axem se convertit), the 'approximation' sense (circa eandem horam), the 'concerning' sense (disputare circa aliquod) – the last two of which are post-classical and thus have to be later extensions.

Further research is certainly needed to verify whether the Latin preposition, a representative of the Romance languages, developed in analogous ways to English *about*, *around* and German *um*, representatives of the Germanic languages. However, the apparent similiarities listed above strongly suggest that they are more alike than different, which, in turn, may be indicative of deep-seated cognitive principles in the minds of speakers, operating across geographic, cultural and temporal boundaries. Whether it is the Roman antiquity, the times of king Ælfred, or the 14<sup>th</sup> century, in the end, one and the same schema, the mental image of a circle, gave rise to highly complex, yet strikingly similar networks of meanings. Synchronically, prepositions may be chaotic and frustrating, but diachronically, they seem tolerable.

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## **Appendix**

## **English abstract**

Using a cognitive linguistics perspective and hence viewing language as largely conceptual and experiential in nature, the present thesis aims at providing a theoretical analysis of the rich polysemy exhibited by the two English prepositions *about* and *around*. It attempts to show that the multiple senses commonly associated with prepositions are not accidental or arbitrary, as has been traditionally assumed, but are derived from, and related to, each other in a principled and motivated fashion. In line with the assumption that lexical items have a prototype structure, the polysemous nature of both about and around will be explored by means of a semantic network, consisting of one central sense, that is, the primary source, around which all other extended senses, be they spatial, temporal or abstract, are systematically organized. Each node in the network represents a certain configuration that differs from the adjacent ones with respect to one or two properties. The main driving forces behind the meaning extensions are considered to be context-induced reinterpretations, as well as a combination of image schemas, imageschematic transformations and metaphors. While, so far, the large majority of prepositional network modelers has primarily investigated synchronic data from one single language, the analysis proposed for English about and around tries to go one step further by adopting a diachronic approach, on the one hand, and integrating crosslinguistic comparison (English-German), on the other.

## German abstract

Aus dem Blickwinkel der Kognitiven Linguistik, die die konzeptuelle und körperfundierte Struktur der Sprache in den Vordergrund rückt, präsentiert die vorliegende Arbeit eine Analyse der ausgeprägten Polysemie der beiden englischen Präpositionen about und around. Ziel ist es, zu zeigen, dass die zahlreichen Bedeutungen, die Präpositionen allgemein zugeschrieben werden, keineswegs als zufällige und arbiträre Erscheinungen zu verstehen sind, wie in der traditionellen Linguistik oft angenommen wurde, vielmehr hat die Vielfalt an Bedeutungsvarianten einen systematischen und motivierten Ursprung. Unter der Annahme, dass lexikalische Begriffe eine Prototyp-Struktur aufweisen, werden die Polyseme von about und around mittels eines semantischen Netzwerks untersucht, dass aus einer zentralen Grundbedeutung besteht, von der sich alle anderen Kernbedeutungen – lokale, temporale und abstrakte – systematisch ableiten lassen. Jede Verknüpfung repräsentiert ein bestimmtes relationales Profil, das sich von den umgebenden durch wenige bedeutungsdifferenzierende Merkmale abgrenzt. Vorangetrieben wird diese semantische Erweiterung durch von kontextuellen Faktoren ausgelöste Umdeutungen, sowie einer komplexen Verflechtung von verschiedenen Bildschemata (image schemas), deren Transformationen (imageschematic transformations) und Metaphern. Während die große Mehrheit der bisher entworfenen präpositionalen Netzwerke synchronische Untersuchungen waren, ist die vorliegende Analyse der englischen Präpositionen about und around einerseits diachronisch, andererseits kontrastiv (Englisch-Deutsch) angelegt.