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A Diachronic Application of Frame Semantics to Meaning Change in Prepositions: The Case of German *mit*

By

Christine Marie Vais

A dissertation submitted in partial satisfaction of the

requirements for the degree of

Doctor of Philosophy

in

German

in the

Graduate Division

of the

University of California, Berkeley

Committee in charge:
Professor Thomas F. Shannon, Chair
Professor Irmengard Rauch
Professor Eve Sweetser

Summer 2022

A Diachronic Application of Frame Semantics to Meaning Change in Prepositions: The Case of German *mit*

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Christine Marie Vais

ABSTRACT

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Professor Thomas Shannon, Chair

The word class preposition contains many highly polysemous members whose meanings may often seem completely unrelated. This project in a close examination of the polysemy network of the German preposition *mit* in each of the four (documented) major time periods of the language, namely Old High German, Middle High German, Early New High German, and New High German (Penzl 1995). Each of the distinct senses of the preposition is analyzed using Charles Fillmore's frame semantic approach (Fillmore 1982, Fillmore & Baker 2009, among others) and a visual representation of the polysemy network in each of the time periods is drawn up to show precisely how the senses are related to one another.

By using frame semantics as a methodological basis for this undertaking, this work is able to illustrate the motivation behind the changes in the polysemy network diachronically rather than merely appealing to traditional textbook mechanisms of semantic change, such as amelioration, pejoration, synecdoche, etc. (Crowley & Bowern 2010). While these mechanisms are indeed still at work, they do not account for the motivation behind the semantic change.

This project aims to offer the field of historical lexical semantics a framework to follow in order to analyze the polysemy network of a word both synchronically and diachronically and to show the motivation behind the semantic changes of that word.

This study is organized as follows: In chapter 2, I review traditional, non-cognitive approaches to lexical semantics and illustrate the reasons for which these approaches are ill-suited for the undertaking in this dissertation. Chapter 3 is a discussion of cognitive approaches to lexical semantics and shows the reasons for which I have chosen frame semantics as the theoretical basis for this study. Chapter 4 details the methodology, including discussion of the applicability of frame semantics to this task as well as an overview of the corpora used and the method of data analysis. In chapter 5, I present the findings of this study, including a discussion of the twenty-five frames found in the data to be evoked by the preposition *mit* as well as visual representations of the synchronic and diachronic polysemy networks of *mit*. In this chapter, I also compare my findings to three authoritative works which offer semantic analysis of the preposition to varying

degrees. In chapter 6, I make concluding remarks, discuss limitations, and suggest further research.

For Ollie

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List of Abbreviations

ENHG	Early New High German
FE	Frame element
FN	FrameNet
IITSC	Invited inferencing theory of semantic change
INSTR	Instrumental case ending
OED	Oxford English Dictionary
OHG	Old High German
MHG	Middle High German
NHG	New High German
NSM	Natural Semantic Metalanguage
LU	Lexical unit

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CHAPTER 1: INTRODUCTION

1.1 Background

Two conflicting schools of thought regarding the semantics of prepositions exist within the field of theoretical linguistics. The first view, mainly held by generative grammarians and linguists of the pre-cognitive era, is that prepositions function only as grammatical markers, that is, they are heads of prepositional phrases and can only license the object or argument of the prepositional phrase (see Chomsky 1957, van Valin 2001, among others). In this view, prepositions may be markers of traditional semantic roles, such as Agent, Patient, or Instrument, but they themselves carry little to no semantic load. The more contemporary viewpoint, on the other hand, i.e. the cognitive viewpoint, is that prepositions do, in fact, carry their own semantic load, and furthermore, they are actually highly polysemous (see Brugman 1988, Luraghi 2003, among others). In this work, I adopt the cognitive stance on prepositions, as the main task of this dissertation is to propose a new framework in which to analyze the semantics of prepositions both synchronically and diachronically–an undertaking which itself is not supported by the pre-cognitive viewpoint. However, I do not wish to dismiss this school of thought entirely without examining the reasons for which it is ill-suited to the task at hand. In the following chapters, I include examinations of both schools of thought, though ultimately determining that the cognitive perspective is best suited for this undertaking.

Within the word class *preposition*, we can divide the members into two categories: those whose meanings are primarily spatial, such as English *in, above,* and *behind* (German *in, über,* and *hinter*, in most cases) and those whose meanings are primarily non-spatial, such as English *about, of,* and *for* (German *um/über, von,* and *für*, again, in most cases). There already exists a large body of work examining the polysemy of spatial prepositions (Brugman & Lakoff 1988, Cuyckens 2011, Lindner Regier 1996, Rice 1993, Svorou 1994, among others), but the body of literature on the polysemy of non-spatial prepositions is much smaller (see Meex 2001, Dekeyser 1990). This dissertation is a synchronic and diachronic examination of the polysemy of the German preposition *mit*, most of whose meanings are non-spatial.

1.2 Purpose of this study

The main purpose of this study is to offer a new framework in which to analyze the synchronic polysemy network of a word across multiple time periods and also illustrate the motivation behind its semantic change by analyzing these synchronic networks diachronically.

In order to do so, three specific tasks have been undertaken. First, I have analyzed 1200 examples of German *mit* across the four major (documented) time periods of the language using a frame semantic approach (cf. sections 1.3 and 3.3 for more detailed discussions of frame semantics). Second, based on the frame analysis of the data, I have drawn up synchronic polysemy networks of *mit* in all major periods of the language. And third, I have generated a diachronic polysemy network of *mit* which shows all usages of *mit* that appeared in the data across all time periods. By drawing up the polysemy networks based on frames, one can readily see the motivation behind the shifts in meaning from one period to the next.

These three tasks outlined above are, as far as I know, novel undertakings in the field of historical lexical semantics. First, frame semantics has not previously been applied to historical data. Second, visual representations of diachronic polysemy networks for prepositions showing motivation for semantic change have not been published. And third, full polysemy networks pertaining to one preposition have not been compared diachronically (Brenda 2014 comes close, but there are some issues with the data, cf. section 3.1.1).[1]

1.3 Theoretical framework

In this section, I briefly outline the theoretical framework used in this study, namely frame semantics and the invited inferencing theory of semantic change. Each of these are discussed in more detail in the following chapters.

1.3.1 Frame semantics as theoretical basis

As stated above, in order to systematically analyze and categorize each usage of German *mit*, I have chosen to use Charles Fillmore's frame semantic approach. Initially proposed by Fillmore in 1968 (Fillmore 1968), frame semantics asserts that the process of human language cognition depends upon many different scenes or schemas, called frames, each of which are evoked in the mind by different lexical items. For example, consider the Modern English verb *arrive*. When this word is cognized, the cognizer understands the meaning of it not through its definition, but through a certain frame that is evoked in the mind upon perceiving the word. Thus, when this word is perceived, the perceiver knows not that there will be some indefinite event of arrival, but that there must be a **person** (or object) performing the act of arriving, a **source** from which the person originated, a **path** along which the person traveled, a **goal** which the person has reached upon arrival, and a **means** of transportation–not to mention a **time** at which the event took place. This frame, i.e. the entire situation evoked in the mind by the utterance of the word *arrive*, can be referred to as the ARRIVING frame, which is composed of all the concepts (stated above in bold-faced type) that are evoked upon the perceiving of the word *arrive*. In frame semantics, these concepts are called 'frame elements'. Each 'core' frame element, i.e. frame element that must be understood in order to process an utterance, need not actually be instantiated in the utterance in order for the perceiver to correctly process the utterance, as shown in 1a–1c below (each of the italicized words being the *target*, i.e. the lexical item that evokes the ARRIVING frame):

(1a) We've finally *arrived* in Rome! (Person and Goal only)
(1b) Sarah *came* via Bus. (Person and Means only)
(1c) I *arrived* in Dresden via Frankfurt. (Person, Goal, and Path only)

[1] De Mulder and Vanderheyden (2013) published a work describing the French preposition *sur* and its meanings diachronically using a prototype semantics approach (see section 3.1), but they ultimately conclude that the cognitive connections between the meanings of *sur* are not able to be discerned "because most of its non-spatial meanings have already been present from Old French on" (de Mulder & Vanderheyden 2013: 191). In this work, in contrast to de Mulder and Vanderheyden's study, I argue that by using frame semantics, the motivation behind the meaning changes of German *mit* are easy to discern.

The frame of ARRIVING is thus defined as: A Person (or Theme) moves from a Source along a Path to a Goal by a Means of transportation. [2]

Frame Semantics is discussed in greater detail in section 3.3 and its application to the study at hand in section 4.2.1.

1.3.2 Invited inferencing theory of semantic change as supplementary framework

Originally proposed by Elizabeth Traugott and Richard Dasher in 2004, the Invited Inferencing Theory of Semantic Change (henceforth IITSC; Traugott & Dasher 2004) offers a logical explanation to appeal to in which one meaning evolves into another via a process involving only a few straightforward steps. Fundamentally, this processes begins with one word that is uttered in a novel way (i.e. carrying an utterance-token meaning). It then becomes conventionalized (becoming an utterance-type meaning), and ultimately evolves into a new (coded) meaning. Thus the word, as a result of this process, now carries an additional meaning, hence it is polysemous.

Applying this theory to the study at hand, we find multiple instances in which German *mit* carries two different meanings, indicating that the preposition is undergoing this process at various stages of the language.

The IITSC is discussed in greater depth in section 3.4.1 and its application to this study in section 4.2.2.

1.4 Methodology

In order to complete the tasks listed in section 1.2, I have taken the following steps. First, I analyzed data (1200 total examples of *mit,* keyword in context) from four different corpora–one for each major time period of the language. I then categorized each usage of *mit* into its proper frame based on the frame elements occurring with *mit*. After that, I analyzed each frame and drew up polysemy networks for each time period of the language. Finally, I drew up a diachronic polysemy network of *mit* showing all usages that appeared in the data across all time periods.

Further details of this methodology are discussed in chapter 4.

[2] Often the frame element Time is left out of event frame definitions, as it is understood that all events happen at a certain time, therefore, this frame element is not vital, i.e. a 'core' frame element in many cognitive frames. The same often also applies to Place, as all events are understood to happen in a certain place; however, in the ARRIVING frame, there are a number of places that are relevant to the event, thus there are specified frame elements referring to place (cf. section 3.3.7 on core and non-core frame elements).

1.5 Summary

As stated above, as of now there exist only a handful of semantic studies which both synchronically and diachronically examine the full range of polysemy of a preposition whose meanings are primarily non-spatial (see de Mulder & Vanderheyden 2013 as one example). Additionally, there does not appear to be a framework to follow in order undertake this task. With this study, I intend to offer a new method in historical lexical semantics by proposing a framework to follow (namely, frame semantics and the IITSC) and an example application of this framework using the German preposition *mit.*

The organization of this dissertation is as follows: Chapter 2 provides an overview of non-cognitive approaches to lexical semantics, including historical-philological semantics, structuralist semantics, generative semantics, and contemporary (non-cognitive) approaches. The intention of this chapter is to show the reader the reasons for which these approaches to lexical semantics are ill-suited to the task at hand. Chapter 3 is an outline of cognitive approaches to lexical semantics and includes discussion of semantic categorization, prototype theory, conceptual metaphor and metonymy, frame semantics, and cognitive semantics as applied to meaning change. This chapter serves to provide the reader with a general overview of contemporary cognitive approaches to semantics and the reasons for which I have chosen to use frame semantics and the IITSC. Chapter 4 details the methodology used in this study, including a discussion on the applicability of frame semantics and the IITSC, an overview of the corpora used in the study, and the data analysis methods. The aim of this chapter is to provide the reader with the knowledge as to how this study was conducted. Chapter 5 presents the findings of the study and includes details on the frames evoked by *mit* along with a number of examples from each time period. It also includes visual representations of both the synchronic and the diachronic polysemy network(s) of German *mit*. In the final section of chapter 5, I compare my findings to those of three authoritative works which include semantic analysis of the preposition under examination in this work. In chapter 6, I make concluding remarks, discuss limitations to the study, and propose further research.

As stated above, in the next chapter, I present a general overview of various non-cognitive approaches to semantics and show the rationale for rejecting these approaches for the purpose of this study.

CHAPTER 2: REVIEW OF NON-COGNITIVE APPROACHES TO LEXICAL SEMANTICS

While the field of lexical semantics was not considered a distinct academic discipline until the 19th century, it has been researched under the umbrella of related disciplines dating back to classical antiquity philosophers such as Plato. In his 4th century essay *Cratylus* on the philosophy of language, Plato considers the 'convention and agreement' of names for objects, including the phenomenon of one name being replaced by another, yet still being the 'correct' name. Lexical semantics continued throughout the Middle Ages under the academic discipline of rhetoric, in which students studied lexical concepts such as metaphor, metonymy, and euphemism, to name just a few. Though this field has been examined–albeit in varying academic spheres–for centuries, I will begin my discussion in the not too distant past, when lexical semantics as an academic discipline in itself began gaining momentum in the 19th century. There are a number of logical manners in which to organize and group approaches to lexical semantics, but this discussion follows Dirk Geeraerts' book *Theories of Lexical Semantics* (Geeraerts 2010) in this regard, as his work is very thorough and remains chronological until varying approaches branch off and follow their own path.

The purpose of this chapter is to provide the reader with knowledge about various non-cognitive approaches to lexical analysis and to show the reasons for which these approaches are not suitable for the task at hand. The chapter is organized as follows: The first section focuses on what Geeraerts terms the historical-philological tradition, which lasts from approximately 1850 to 1930. Crucial developments in this period manifest in the field of lexicography and in meaning change classification. The next era of lexical semantics discussed is the structuralist period beginning in the 1930s, in which lexical field theory, componential analysis, and relational semantics emerge. Following that is a discussion of the seminal paper from Jerrold Katz and Jerry Fodor entitled *The structure of a semantic theory* (Katz & Fodor 1963), in which a generative approach to semantics is proposed, paving the way for generativist semantics. The final section of this chapter discusses contemporary approaches (which Geeraerts terms 'neo-structuralist semantics', though recognizing the proponents of these approaches would most likely not refer to their work as such), including Anna Wierzbicka's Natural Semantic Metalanguage and Ray Jackendoff's Conceptual Semantics. It should be noted that this discussion is in no way a complete examination of the lexical semantic discipline, but rather serves as a brief overview of some of the prominent (non-cognitive) approaches to lexical semantics. Cognitive approaches are discussed in chapter 3.

In addition to the general discussion of approaches to lexical semantics, studies of particular lexical items accompany each approach. Where applicable, I have included studies of prepositions, as that is the focus of the work at hand. However, many non-cognitive approaches to and theories of lexical semantics do not consider prepositions at all or at least not in great depth, for, as noted in the previous chapter, some schools of thought considered prepositions as bearing no semantic load. In the studies that do consider prepositions, it is almost always only the spatial sense of the word that is examined. This dissertation digs deeper and explores all the senses of the preposition examined, distinguishing it from the non-cognitive approaches discussed here, and placing it in the realm of cognitive semantics.

2.1 Historical-philological semantic approaches

The historical-philological semantic tradition, as named by Geeraerts, begins in the early nineteenth century with the growing focus on meaning change and spans roughly a century, the end point being recognized by emerging structuralist semantic approaches (see section 2.2). This lexical semantic tradition is marked by an interest in both diachronic semantics and the psychological relationship between language and the mind. The primary contribution of this tradition is the classification of types of semantic change into categories such as amelioration, pejoration, specification, and generalization, to name just a few. These types of changes are still widely used in historical linguistic textbooks (see Crowley & Bowern 2010 as one example). Lexicography is also a prominent approach to lexical semantics at this time and contributed much to the development of the field. I begin this section with a discussion of lexicography in the pre-historical-philological semantics era and the advancements in the field during this period. Following that comes a discussion of meaning change classification.

2.1.1 Lexicography

While lexicography as a discipline in its own right began around the early 17th century with the emergence of monolingual dictionaries (bilingual dictionaries for translation purposes were already abundant at that time), these dictionaries tended to be rather prescriptive, providing the reader with **intended** usages of lexical items. It wasn't until the 19th century that dictionaries with a descriptive intention emerged, two of the major works being the Grimm brothers' *Deutsches Wörterbuch* (begun in 1854) and the *Oxford English Dictionary* (begun in 1884). These works not only provided definitions of lexical items, but also included etymology of the lexical item, translation equivalents in Latin and Greek, dialect variation, and an abundance of example usages from authentic texts, including references. While earlier monolingual dictionaries also contained literary quotations, according to Geeraerts "they were aimed at safeguarding the purity of the language, or at least describing normatively accepted usage" (Geeraerts 2010: 8).

Let us examine first a fairly straightforward, i.e. non-polysemous, lexical entry from the Grimm brothers' work, as the highly polysemous nature of prepositions result in a multi-page description. Below is a partial entry for the noun *Pfirsich* ('peach') in the Grimm brothers' *Deutsches Wörterbuch* (Grimm & Grimm) – original German text is on the left, my own English translation on the right.

PFIRSICH, m., pfirsiche, pfirsich, pfirsche, f. persischer apfel, die frucht des pfirsichbaumes (prunus amygdalus persica) und manchmal dieser selbst. mhd. pfërsich, mnd. përsik m. schon vor der ahd. zeit entlehnt aus lat. persicum (malum), persica (malus); das masc. geht auf mlat. persicus (pfirsichbaum), das fem. auf persica (ital. pesca, franz. pêche) zurück.

PEACH, m. [spelling variations], f. peach apple, the fruit of the peach tree (prunus amygdalus persica) and sometimes the peach tree itself. MHG pfërsich, MLG përsik m. already before the OHG time borrowed from Lat. persicum (malum), persica (malus); the masc. dates back to MLat persicus (peach tree), the fem. to persica (Ital. pesca, Fr. pêche).

1) mhd. und auch nhd. vereinzelt bis ins 18. jh. pfersich m.:

dâ stuont ein wünneclîcher boum,
dâ pfersich ûfe bluoten.
Konrad Parten. 11275;

iʒt man die pfersich nach anderm eʒʒen, sô zerprechent si die andern kost in dem magen und verderbent si. Megenberg 342, 25; pfersich, *persicum* Dief. 429[b], pfersig Dasyp. (1556) L 4[a];

die pfersich (sind) bleich wie falber tod.
Spee trutzn. 90 B;

pfersiche dünsten Nürnb. kochb. (1712) 711. norddeutsch auch fem. (vgl. 3): sie nam ein e grosze pfersich vom schenktisch. Hermes Soph. (1776) 2, 407. — nasaliert pfersing (aus pfersig): der gemein weisz saftig pfersing. Bock kräuterbuch 338[a]; der kern eines pfersings. Tabernaem. 1409[a]; plur. die pfersing sind dem magen gar schädlich. ebenda und Bock a. a. o. vgl. auch die zusammensetzungen.

2) pfirsich m. Dief. 429[b] (pfirsich und pfirsig): des pfirsichs (baumes) edle frucht. Brockes 9, 177;

mit wankendem schatten des pfirsichs (bau mes). Voss Luise 2, 3;

ihr beiszet da mit solcher lust
den pfirsich. Lenau (1880) 2, 33;

es ist der einzige pfirsich (pfirsichbaum) hier, auf dem ganzen gute haben wir keinen. Freytag ges. werke 6, 100; plur. die pfirsich Colerus 2, 212[a]; so gewis ... diese tannen pfi rsiche tragen. Schiller 2, 102 (räuber, schaus p. 2, 3);

noch gedeihn die pfirsiche mir.
Hölderlin 1, 101;

1) MHG and also NHG occasionally until the 18th century pfersich m.:

there stood a marvelous tree
upon which peaches bloomed.
Konrad Parten. 11275;

if one eats the peaches after other food, then they will disturb the other fare in the stomach and they will ruin it. Megenberg 342, 25; pfersich, *persicum* Dief. 429[b], pfersig Dasyp. (1556) L 4[a];

the peaches (are) pale as death itself.
Spee trutzn. 90 B.

stewing peaches Nürnb. cookbook. (1712) 711. North German also fem. (compare 3): she took a big peach from the buffet. Hermes Soph. (1776)2, 407. – nasalized pfersing (from pfersig): the common white juicy peach. Bock book of herbs 338[a]; the pit of a peach. Tabernaem. 1409[a]; plur. the peaches are very harmful to the stomach. ibid. Bock loc. cit. compare also the compound.

2) peach m. Dief. 429[b] (pfirsich and pfirsig): the precious fruit of the peach (tree). Brockes 9, 177;

with wavering shade of the peach (tree). Voss Luise 2, 3;

you all bite there with such desire
the peach. Lenau (1880) 2, 33;

it is the only peach (peach tree) here, on the whole property we have none.
Freytag collected works; plur. the peaches Colerus 2, 212[a]; thus certain…these firs bear peaches. Schiller 2, 102 (räuber, play 2, 3);

still the peaches thrive for me. Hölderlin 1, 101;

This dictionary entry includes four numbered items, one for each group of spelling variations: *pfersich*; *pfirsich* (includes *pfirsig*); *pfirsiche* (includes *pfirsich f.*, *pfersicke,* and *pfirsicke*); and *pfirsche*. I have provided only the first two items, as I am merely showing the information contained in these emergent descriptive dictionaries. As you can see from the first line of the entry for *Pfirsich*, a number of spelling variations are listed as the heading, though not all variations are included in the heading. The next few lines provide a simple definition of the word and an etymological description, in addition to the forms of the lexical item in other contemporary European languages, such as Italian and French. Following that comes the first item; again, in this case each numbered item is based on spelling variation, not meaning variation. These numbered items begin with the spelling variety of the word, and in this case, as the word in question is a noun, the grammatical gender. Next come example instances from authentic texts along with their references. Following the first item, *pfersich,* comes the spelling variation *pfirsich* listed under the number two. This again is followed by the gender of the noun and examples taken from authentic texts with their references. It should be noted that often, but not always, the year of the text is present. Most of the reference works are cited in the beginning of the dictionary in the *Quellenverzeichnis* section where one can find the year of the text, if not noted in the entry itself; however, there are some references missing in this section, an inconsistency that may weaken the validity of the work, though only very slightly. This work is incredibly significant in that it illustrates the language in actual usage, thus is descriptive of the language as it was used at the time, not prescriptive like the work of dictionaries beforehand.

Moving now to a prepositional entry from Grimms' dictionary, let us examine part of the entry for the preposition *neben* (most often translated into English as *next to*). The organization of this entry is a bit more complex than that of the concrete noun considered in the entry for *Pfirsich*. It also spans roughly a page and a half. I have cropped the entry below significantly in order to highlight the relevant components of it, omitting various phonological and syntactic descriptions. I have also omitted the entire section of the entry for *neben* dedicated to the adverbial usage. It is important to note that case is discussed and exemplified thoroughly in Grimms' dictionary, but the specifics are not relevant to the topic of this dissertation. Below is an abbreviated version of the entry for *neben* (Grimm & Grimm). Once again, the original German is on the left and my translation on the right:

NEBEN, adv. und präp.
1) herkunft und form. die ahd. präpositionale verbindung *in ëban* wurde durch anschlusz zu *inëben* und durch aphärese schon bei Notker zu *nëben* (Graff ahd. präpos. 99)...

II. neben präpos.
1) schon ahd. ist aus der verbindung des adverbs mit dem dativ eine präpositionale fü gung entstanden: aus *sizze mir in eben* wird *sizze neben mir* (Notker 109, 1); mhd.

NEXT TO, adv. and prep.
1) origin and form. the OHG prepositional combination *in ëban* ['in even'] became by cliticization *inëban* and by aphaeresis as early as in Notker *nëban* (Graff OHG prep. 99)…

II. next to prep.
1) as early as OHG a prepositional construction developed out from the connection of the adverb with the dative: from *sit to me in even* becomes *sit next to me* (Notker 109, 1); MHG

er was drî ellen breit
eneben sîner ahseln.
Rolandslied 60, 24;

ob dû iemer man gelobest
neben im.
Iwein 1818.

2) nhd. *neben*, *juxta* Aventin. 1, 457, 9. Albertus teutsch gramm. (1573)...
a) in gleicher linie mit (im vergleich mit), zur seite, an der seite von, nahe bei.
α) mit dativ der person oder sache: na^{e}bend dir, na^{e}bend dem weg. Maaler; neben einem, neben dem ufer gehen. Stieler; do sah er ston einen feigbaum neben dem weg. Keisersberg evang. (1517) 71^{d}...
β) mit dem genetiv: mhd.
dâ wære du ie neben mîn.
klage 863;

der erbeiʒte nider neben sîn.
Biterolf 10421;

nhd. und mit dem sach ich neben mein ain tiefen weg. B. Zink 107, 23...

γ) schon hier zeigt sich md. im 12. jahrh. der accusativ:
der nebin dih an dem crûce stuont.
glaube 1844.

nhd. sprach abermahl der neben ihn (vorher dieser, so darbei stund). Kirchhof wend. 3, 367 Öst.

b) *zugleich mit, nebst, auszer*.
α) mit dem dativ: ob nicht der Luther gläubte, dasz der kaiser auch ein christ wäre und wurde diese sachen neben andern fürsten und ständen ... örtern und urtheilen. Luther tischr. 1, 66…
β) mit dem genetiv: die vier verordneten neben des ambtmans. österr. weisth. 6, 12, 31 (16. jahrh.); der rath und gemein nöben

he was three forearms wide
level to his shoulders.
Rolandslied 60, 24;

and you always praise one
even with him.
Iwein 1818.

2) NHG *neben*, *juxta* Aventin. 1, 475, 9. Albertus German gramm. (1573)...
a) on the same level with (in comparison to), to the side, on the side of, close to
α) with dative of person or thing: to the side of you, to the side of the path. Maaler; close to one, walk on the side of the bank. Steiler; there he saw standing a fig tree on the side of the path. Keisersberg evang. (1517) 71^{d}...
β) with the genitive: MHG
there you would be always next to me.
klage 863;

he got down close to him
Biterolf 10421;

NHG and with that I saw close to me a wide path. B. Zink 107, 23…

γ) by this time MG shows in the 12th century the accusative:
he who stood close to you on the cross.
glaube 1844

NHG again spoke the one close to him (earlier: the one who stood thereby). Kirchhof wend. 3, 367 Öst.

b) *along with, in addition to, besides.*
α) with the dative: if Luther did not believe that the emperor also was a Christian and would protect these things in addition to other places and judgements and would stand … Luther tischr. 1, 66…

β) with the genitive: the four provided in addition to the civil servant. österr. weisth.

des alten vorgewösten richter. 134, 13 (vom j. 1547).
γ) wie es scheint auch mit dem accusativ: dieser esel hat nicht viel an sich, das dem menschen ähnlich siehet, als die äuszerliche gestalt neben kleider und kopfbund. pers. rosenth. 3, 25.
c) gleich mit, ebenso wie: die pflaumwoll ... gleicht der seidin, deren thuºch man neben der seiden verkaufft. Frank weltb. 202ª.
d) in gleiche linie mit, an die seite von.
α) ahd. nur mit dem dativ (s. oben 2): sazte in in eben sinemo stuole. Notker bei Graff 1, 96. ausnahmsweise kommt diese fügung auch nhd. noch vor, schwankend zwischen dativ und accusativ: Phillis muszte sich neben dem greisen sezen, und er sezte sich neben die Phillis. Geszner 2, 59…
β) die regel ist der accusativ aus dem oben angegebenen grunde: mhd. (zunächst ndrh.) her sazte sie inebin in.
k. Rother 1328…

e) *neben sich, bei seite, seorsim* Dasyp. K 7ᵇ; nabend sich weichen, secedere; nabend sich legen, seponere...

6, 12, 31 (16th cent.); the council and the region in addition to the old harried judge/ 134, 13 (from the year 1547).
γ) as it seems also with the accusative: this donkey did not have much about it that looks similar to men, other than the external shape in addition to clothes and headband. pers. rosenth. 3, 25.
c) *same a, just like*: the plum-wool … resembles silk, whose cloth one sells just like silk. Franl weltb. 202ª.
d) *in the sme line as, at/on the side of*.
α) OHG oly with the dative (see 2 above); [he/she] sa down at the side of his chair. Notker by Graff 1, 96. As an exception, this construction appears also still in NHG, oscillating between dative and accusative: Phillis had to sit down on the side of the old man, and he sat down at the side of Phillis. Geszner 2, 59 …
β) the rule is the accusative on the grounds given above: MHG (initially North-Rhinish) she sat down on the side of him. k. Rother 1328…

e) *beside, to one side, seorsim* [Lat. ‘apart from’] Dasyp. K 7ᵇ; to yield to on side, *secedere* [Lat. ‘to withdrawal’]; to lay to one side; *seponere* [Lat. ‘to disregard, isolate, reserve’]…

Just as the entry for *Pfirsich*, this one begins with an etymology of the word; however, because *neben* is polysemous, defining the word is reserved for separate numbered items below. The entry begins with etymological information, comparison forms between the Germanic dialects, and case usage observations (the latter two matters have been omitted here, as they are not relevant to the current study). Next comes the entry for *neben* in its adverbial usage (also omitted as I am concerned with prepositions in this study). Then comes the prepositional senses of *neben* listed under the Roman numeral II. The first sense of the lexical item (delineated by the second number 1 above) suggests a transitional sense between the adverbial usage and the prepositional usage (thus translations here are tricky!). Following this (under the second number 2) are the clear cases of prepositional usage, divided into five sections (a, b, c, d, and e) – one for each sense of the prepositional usage – and within each of these sections are definitions and examples from authentic texts, including references. Some of the sections also partition the examples by case usage, noting dialectal differences. I do not wish to discuss each of the senses here, as the objective of including this entry is merely to display a lexicographic approach from the historical-philological period.

The work of the Grimm brothers in this undertaking is both extensive and invaluable. It was the first descriptive dictionary of the German language and is highly detailed, including etymological, dialectal, and syntactic observations. It is also a diachronic work in that the examples included come from Old High German, Middle High German, and what they refer to as New High German.[3] More importantly, all the data came from authentic texts from each of the time periods, thus this is a usage-based approach. Also of interest here is the observation and notation of the link between the adverbial and the prepositional usages of *neben*. This illustrates that the Grimm brothers were aware of the process of meaning change and the fact that meanings and word boundaries are fuzzy (a term which will be used frequently by cognitive semantics later on). Also of importance is the partitioning of the entry into distinct senses of usage (a process I refer to as 'sense disambiguation' in this work), and the fact that all senses of the lexical item are included, not just the concrete (spatial) senses. This shows that the Grimm brothers were well aware of polysemy in language at this time.

While this work is a major contribution to the field of lexical semantics, a few shortcomings should be noted. First and foremost, observe that there is no explanation for how the senses of the word are related. While the relation may seem relatively intuitive, there is no explicit discussion of these relations. This was, however, not their intention in this undertaking and the project was large enough in size that this would have been an enormous task. Second, and more nitpicky, the organization of the data is inconsistent in certain aspects. For example, sometimes the year of the text is printed next to the citation, but often it is omitted (though admittedly often, but not always, one can find the dates in the citation section at the beginning of the work). Because this is a diachronic work, it would be advantageous to list the dates of publication in addition to the stage of the language (i.e. OHG, MHG, etc.), so that one could more easily discern the evolution of semantic shifts. Nevertheless, this work is a significant contribution to the field of lexical semantics as it is an invaluable resource in diachronic analysis of the German language. This lexicographic approach, though a useful reference in many ways, is not suitable for the current undertaking, as it does not make clear the relationship(s) between each distinct usage of the word under examination.

[3] Though I refer to this as Early New High German in this dissertation.

2.1.2 Meaning change classification

Most beginning students of historical linguistics have studied the meaning change classificatory labels that emerged from the historical-philological period and many linguists still use these labels, i.e. amelioration, pejoration, etc., today. Geeraerts states the aim of this approach succinctly, as "…diachronic semantics is concerned with the classification of mechanisms of semantic change, an activity that links us with lexicography on the one hand and historical linguistics on the other" (Geeraerts 2010: 9). Additionally. this approach connects up to the psychological aspect that historical linguists were concerned with at the time. This is most clearly demonstrated by two of the classificatory labels: 'specialization' (also known as 'narrowing') and 'generalization' (also commonly known as 'broadening'). Specialization is the term for the phenomenon of a word coming to denote only a part of its earlier meaning. An example of this used by Crowley & Bowern is the lexical item *hound* (Crowley & Bowern 2010: 200). In the Old English period (spelled *hund*), it referred to any class of dog (just as New High German *Hund*); however, *hound* in Modern English refers to a specific class of dogs, namely hunting dogs such as beagles or bloodhounds. Generalization, on the other hand, is the opposite. This label is used to denote the phenomenon in which a word comes to have a broader meaning. An example of this, also given in Crowley & Bowern, is the Modern English word *dog* (from Old English *dogge*) which denoted a specific breed of dog that originated in England (Crowley & Bowern 2010: 200).

Geeraerts outlines the main types of change discussed and researched during this period, breaking them into four groups (non-analogical changes of denotational meaning, non-denotational meaning changes, analogical changes, and lexicogenetic mechanisms).[4] The breakdown of these groups is unnecessary for this discussion, so instead I have included a chart outlining the major meaning changes discussed during this time period in table 2.1 below. Definitions and examples are paraphrased from Geeraerts (2010: 26–31).

term	**definition**	**example**
specialization (narrowing)	new meaning developed from a subordinate relationship	*queen*: 'wife/woman' → 'king's wife/female sovereign'
generalization (broadening)	new meaning developed from a superordinate relationship	*moon*: 'earth's satellite' → 'any planet's satellite'
metaphor	new meaning developed via figurative similarity	*foot*: 'body part most often closest to the ground' → 'lowest part of a mountain or hill'[5]
metonymy	new meaning developed via relationship of contiguity	*bottle*: 'type of receptacle' → contents of said receptacle

[4] Discussion of lexicogenetic mechanisms is omitted here, as I am primarily focused on meaning change, not the creation of new words, whether created from existing words or out of the blue.

[5] Geeraerts does not include an example of metaphor in this section, thus this example is my own (though a frequently referenced example in the literature).

amelioration	new meaning developed shifting toward a more positive emotive meaning	*knight*: 'boy or servant' → 'soldier'
pejoration	new meaning developed shifting toward a more negative emotive meaning	*silly*: 'deserving sympathy, helpless or simple' → 'showing a lack of good judgment or common sense'
semantic borrowing (semantic calque)	new meanings acquired by copying (part of) the polysemy range of a lexical item from a different language	Greek *angelos*: 'messenger' → 'angel' (via Hebrew *ml'k*: 'human messenger; heavenly messenger, angel'
semantic extension	new meanings acquired by imitating semantic range of a lexical item in the same lexical field (ex. colors)	Dutch *zwart*: 'black'; *zwarte markt*: 'black market, illegitimate trade' → *geld witwassen*: lit. 'to whitewash money'; 'to lauder illegitimately earned money'

Table 2.1: Traditional mechanisms of semantic change

This approach to semantics is valuable in that it takes into account the polysemous nature of lexical items, the relationship between mind and language, and the diachrony of meaning change. From a methodological point of view, however, the application of this theory is lacking. Geeraerts points out that "though the approach focuses on polysemy, [it] restricts its research to single instances of semantic change, in which one reading leads to the other" (Geeraerts 2010: 44). The single instances he refers to are, for example, the fact that *moon* came to denote 'any planet's satellite', but the full range of polysemy was not explored, i.e. the question *What else does* moon *refer to?* was not researched at that time. Another criticism of this approach which Geeraerts identifies (and this dissertation handles) is the lack of data-driven examples, i.e. the fact that though this approach was intended to be usage-based, there was no attempt at a systematic analysis of authentic texts, other than contemporary dictionaries. As is elucidated in chapter 4 on the methodology of this dissertation, this is a corpus study in which all the data has been extracted from authentic texts from each time period – that is, no dictionary entries were used in the data analyzed for this study.

Though these meaning change classifications are useful in describing the shift of a lexical item, another shortcoming of this approach is the lack of account for **motivation** behind semantic change. In this dissertation, not only are the shifts in meaning illustrated by the frame-to-frame relations of each usage of the word, but also the motivation behind the shifts is accounted for by appealing to the IITSC proposed by Traugott and Dasher (cf. section 3.4.1; Traugott & Dasher 2004).

Also not considered by this approach is any examination of prepositions. During the historical-philological period, it was uncommon for this syntactic category to be regarded as bearing

semantic content,[6] thus, to my knowledge, no study using this approach to prepositions is available for discussion, though it would be an interesting examination.

2.2 Structural semantic approaches

Around the 1930s, the field of lexical semantics began drastically evolving with the emergence of structural semantic approaches. As the name itself reflects, structuralist approaches favor systematic procedures of analysis in which language is regarded as a whole system, not just "a loose bag of words" as Geeraerts quite vividly states (Geeraerts 2010: 48). In addition to this systematic approach, crucial differences from the previously discussed era include rejection of the psychological nature of language and assumption of a synchronic stance as opposed to a diachronic one. In this section, I examine two of the dominant structural semantic approaches: lexical field theory and componential analysis.

2.2.1 Lexical field theory

Lexical field theory, also referred to as semantic field theory, is an approach that was employed primarily in Europe. The most notable proponent of the theory was Jost Trier, whose work *Der Deutsche Wortschatz im Sinnbezirk des Verstandes: Die Geschichte eines sprachlichen Feldes*[7] (Trier 1931) is one of the most cited works in the area of lexical field theory. Adrienne Lehrer, one of many scholars who cites Trier's rather well-known example of words in the lexical field of KNOWLEDGE or UNDERSTANDING, describes this approach, stating, "A basic premise of semantic field theory is that to understand lexical meaning it is necessary to look at sets of semantically related words, not simply at each word in isolation" (Lehrer 1985: 283). By 'semantically related', Lehrer is referring to traditional semantic relations such as synonymy, antonymy, hyponymy, etc. In Trier's oft-cited example, he examines (diachronically!) three lexical items from the domain of KNOWLEDGE beginning in early thirteenth century German. Those items are *wîsheit, kunst,* and *list*. Geeraerts summarizes Trier's findings succinctly, stating:

> At the beginning of the thirteenth century, courtly language possesses three core notions referring to types of knowledge: *wîsheit, kunst,* and *list*… *Kunst* conveys the knowledge and skills of the courtly knight (viz. courtly love, the chivalric code of honor, and the liberal arts), whereas *list* is used to indicate the knowledge and the skills of those who do not belong to the nobility (such as the technical skills of the craftsmen). *Wîsheit* is a general term which is used for the noblemen as well as for citizens… One could say that *wîsheit* refers to the general ability to occupy one's position in society (whatever that might be) with the appropriate knowledge and skills… A century later, the division of the field had undergone considerable changes. *List*, which gradually acquires a derogative sense, somehow conveying 'artfulness, shrewdness', is replaced by *wizzen*… *Wîsheit* has ceased to be a general term… instead of the original reading… *wîsheit* now refers to religious knowledge in a maximally restricted sense, i.e. the knowledge of God. *Kunst*

[6] See Sperber 1915 for counterexample.
[7] Roughly translated as *The German lexicon in the lexical field of understanding: The history of a semantic field.*

> and *wizen* indicate higher and lower forms of profane knowledge, without specific reference to social distinction. *Wizzen* gradually begins to refer to technical skills, like the skills of a craftsman, whereas *kunst* starts to denote pure forms of science and art (Geeraerts 2010: 54–55).

The first matter to note here should be that Trier's approach deviates from a structuralist theory in one crucial way: namely, that he takes a **diachronic** approach, whereas one of the main tenets of structuralist semantics is the assumption of a synchronic viewpoint. Geeraerts paraphrases from Trier's article *Altes und Neues vom sprachlichen Feld* (Trier 1968) his explanation for this deviation as such:

> The lexical field theory he [Trier] developed emanated as much from the empirical difficulties encountered while doing historical meaning research as from his theoretical conviction, inspired by de Saussure and Weisgerber, that a different approach to semantics was necessary. While diachronic semantics may be relatively uncomplicated when concrete objects such as 'hand' or 'arm' are involved, it becomes much more difficult to delineate meanings when abstract notions (such as intellectual skills) are at stake: in such a case, the contrastive method of the field approach may allow a better grip on historical data (Geeraerts 2010: 55–56).

Following in Trier's footsteps two decades later, Adrienne Lehrer attempts to demonstrate that:

> … semantically related words are more likely to undergo parallel semantic changes than semantically unrelated ones precisely *because* of their semantic relationships. Semantic relationships tend to remain constant, so that if one word changes meaning, it will drag along other words in the domain (Lehrer 1985: 286).

In her effort to validate this, she presents data on various zoological categories and their metaphors (in English). She successfully proves that if one member of a semantic field comes to have a metaphorical meaning, others in the field tend to contract this meaning as well, even if they already participate in another metaphor (in this case, they tend to drop the earlier metaphorical meaning). Considering one of her examples of the zoological category PRIMATE, she presents data illustrating that the lexical items *ape, baboon*, and *gorilla* all came to have the metaphorical meaning of 'brutishness'. Her data reveal that all three lexical items previously carried a different metaphorical extension: *ape* denoted 'a fool' and *baboon* was a 'general term of abuse';[8] however, around 1800 *ape* acquired the 'brutishness' meaning, *gorilla* acquired the same meaning shortly thereafter, and *baboon* acquired it around 1900. Each of these words also lost their previous metaphorical meaning around the same time as the acquisition of the new meaning, according to Lehrer's data.

Along with a handful of other zoological categories, in this study Lehrer examines gambling terms and dimensional terms which have come to be used to describe taste. Her data are convincing in proving that if one member of a lexical field comes to have a metaphorical extension, others will follow; however, a few critical points should be identified. The first point

[8] Lehrer marks *gorilla* as having a different metaphorical meaning as well, but does not state what it was (see figure 3 in Lehrer 1985: 288).

of contention with this study is the source of the data: All of it came from the Oxford English Dictionary, thus there has been no study of this kind conducted on authentic texts, meaning this is **not** a usage-based approach. The second point of contention is the existence of another theory which already accounts for this phenomenon, namely George Lakoff's conceptual metaphor (Lakoff 1987, among others). Lehrer aims to demonstrate the consistency in meaning change across semantic fields, but only uses metaphor as an example. It would be more advantageous if she considered other semantic relationships as well, such as synonymy and antonymy.

One final lexical field theory study which I would like to discuss briefly is Sally Rice's examination of English prepositions (Rice 1993). In this study, Rice examines the prepositions *at*, *on*, and *in* and is primarily concerned with the temporal and non-spatial meanings of these lexical items. She chooses these three prepositions, stating:

> Despite nearly 75 years of research on lexical field theory…there have been few attempts to apply prototype-based categorical notions (like the concept of a field filled with generalized, canonical, and fairly unique tokens) to intra-lexeme semantics" (Rice 1993: 206).[9]

The basis of Rice's study assumes that "each preposition invokes its own lexical field and that lexical fields are best analyzed using lexical network models" (Rice 1993: 206). She discusses various network models in the literature, ranging from traditional hierarchical schemas to radial network schemas (the latter from Lakoff 1987), noting the advantages and disadvantages of each before proposing her own network model which she describes as "3-dimensional, irregular, and somewhat amorphous… it allows one to account for abstract, specific, and highly novel senses of a lexical item at the same time" (Rice 1993: 209). She describes her proposed network in more detail, stating:

> Node types are distinguished on the basis of centrality, productivity, and schematicity. For example, schema nodes, labelled **S**, represent abstractions over individual cases with prototype (**P**) or extension (**E**) nodes representing separate subcases or actual usage tokens… In addition, such a network allows us to capture, using size of the node and length or solidness of the links as a metric, a sense of the productivity of an extension and whether or not it comes to function as a sort of local prototype. Potentially, this network model will allow us to convey the relative uniqueness or ubiquity of a usage type. A node marked **N**, for example, represents a highly novel usage that hasn't yet become conventionalized in the language, but which speakers recognize as related to other more common usages (Rice 1993: 209).

Rice provides two illustrations (figure 2.1 below) of such a model, stating her model would be "something along the lines of" these models (Rice 1993: 209), later adding that she is only proposing the **idea** of a model, not proposing an actual model itself, as there are many questions that remain unanswered.

[9] Rice does not clarify in this work the meaning of "intra-lexeme".

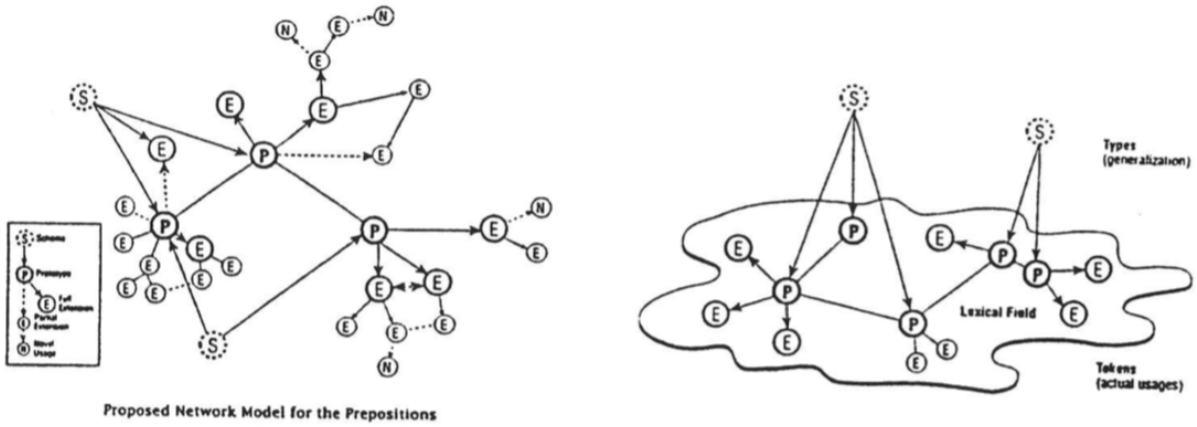

Figure 2.1: Rice's proposed idea of network models (Rice 1993: 217)

Rice then states her "working assumption… that each prepositional form is a complex category with internal structure representing a consortium of individual cases" (Rice 1993: 209). She then discusses example corpus data on the English prepositions *at*, *on*, and *in*, predicting "analogous patterns of polysemy and metaphoric extension for these so-called contact prepositions" (Rice 1993: 210). In this discussion, Rice easily accounts for the differences in usage of each of the prepositions under examination in their strictly spatial senses by appealing to differences in dimensionality. Her examples are as follows (Rice 1993: 210):

(1) Your favorite coffee cup is

at your place/**at** your office.	POINT; 0-D
on the table/**on** its saucer.	SURFACE; 2-D
in the cupboard/**in** the kitchen.	CONTAINER; 3-D

She then shows that this difference in dimensionality can be extended to temporal usages of the prepositions, citing the following examples (Rice 1993: 211):

(2) He died

at 6:01/**at** dawn/**at** Christmas.	BRIEF MOMENT OF TIME
on Sunday/**on** the 12th.	SHORT PERIOD OF TIME
in May/**in** summer/**in** 1897.	LONG EXPANSE OF TIME

Here one can appeal to metaphorical extension in which POINT corresponds to BRIEF MOMENT IN TIME; SURFACE to SHORT PERIOD OF TIME; and CONTAINER to LONG EXPANSE OF TIME. These extensions are readily conceivable, as it is fairly standard to construe time in the sense of space in English; however, non-spatial and non-temporal usages of these prepositions are more difficult to account for.

She discusses quite a few different usages in this work, but I'd like to focus on two in particular, as Rice does a thorough job accounting for the meaning extensions, while remaining consistent using the difference in dimensionality. Below are some usages of the PERCEPTION/COGNITION domain (Rice 1993: 212):

(3) a. They **looked at** the map. POINTLIKE PERCEPTUAL FOCUS[10]
b. He **yelled at** them.

c. He **focused on** the TV. SHALLOW PERCEPTUAL FOCUS
d. Let's **eavesdrop on** their conversation.

e. I **believe in** the new reforms. DEEP CONCEPTUAL FOCUS
f. We **take pride in** our schools.

While it is debatable as to whether the difference in *at* versus *on* in these cases is a matter of point-like focus versus shallow focus, it is clear that the usage of *in* within the perceptual domain relates a deep conceptual focus. One could even add the phrasal verbs *trust in* and *have faith in*, but what about other perceptual verbs such as *rely on* and *pride oneself on*? These both appear to convey a deep conceptual focus, but why then do they require *on* instead of *in*? Rice does not, however, include counterexamples in her discussion of perceptual phrasal verbs here.

The second example of differences in usage of *at*, *on*, and *in* that I wish to examine is what Rice proposes as a "cline between interest and disinterest" (Rice 1993: 212). These examples are as follows:

(4) a. The candidate spoke **at great length.**
b. The candidate spoke **on many subjects.**
c. The candidate spoke **in great detail.**

Regarding the difference here, Rice states:

> Taken together as commentary on a speech, they [4a–c] could be construed as representing a cline between indifference and interest. (10a) [4a here] might be uttered if the speaker was not listening to or was perhaps bored by the candidate and was thus remaining external to the situation, while (10b-c) [4b-c here] could only be uttered if the speaker was actively involved and paying a lot of attention to the content of the speech (Rice 1993: 212).

While I agree with Rice's analysis of (4a) and (4c), I disagree that (4b) is a comparable utterance. (4a) and (4c) appear to be different perspectives on the same event, highlighting one quality of the speech depending upon the viewpoint of the utterer: (4a) is focused on the amount of time the speech took, presumably due to the boredom of the utterer, whereas (4c) is focused on the quality of the content of the speech. The latter utterance can only be made, presumably, if one listened closely to the speech, most likely out of interest. However, (4b) appears to be a general statement about the content of the speech – it does not relate the viewpoint of the utterer, but is rather a matter-of-fact statement. Thus I believe (4b) should not be considered in this comparison. What is striking about the examples in (4a) and (4c), however, is exactly what Rice points out: it is as though (4a) is external to the situation, as the listener is bored, whereas the utterer of (4c) is internal to the situation, i.e. engaged in the lecture.

[10] Rice adds a question mark after each of the explanations in this group.

Now, Rice does not take this data and plug it in to any network model, which is rather disappointing, but she does address the grounds for not yet doing so, one of the primary reasons being that "Until lexical models are subjected to speaker validation, they remain speculative and, inevitably, controversial" (Rice 1993: 215). While speaker validation clearly can add validity to an argument, reliable corpus data may also provide this validity!

While Rice's study falls into the category of a lexical fields approach (thus not the frames approach taken in this study), her proposal of a network model is relevant here and very appealing, as it is more or less a model of polysemy, which I have created from my data and illustrated in chapter 5 (cf. section 5.2).[11]

Considering the lexical field approach as a whole, there are some advantages and some disadvantages. First of all, there have been studies conducted which prove that when a lexical item undergoes semantic change, other semantically related words can change as well (as seen in Trier 1931 and Lehrer 1985), thus affecting the whole system (a point for viewing language as a system); however, just because one lexical item shifts, does not mandate that other semantically related words shift along with it (a point against language as a system). Also, it is important to remember that the lexical field approach is a structural approach, and one of structuralist semantics' main tenets is synchronic analysis, and Trier and Lehrer are exceptions to this. But this raises the question, how does one then account for meaning change using a synchronic approach? Additional criticisms of the lexical field approach, identified by Geeraerts, are what he calls the "internal constitution of the lexical field" and the "external boundaries of the field" (Geeraerts 2010: 56), i.e. what belongs to a lexical field and what does not? The answer to this question has yet to be determined.

The approach in this dissertation is similar to the lexical field approach in that it assumes that words should not be analyzed in isolation, but rather together with other words – though these 'other words' differ between approaches. A lexical field approach analyzes words with similar meanings, whereas a frames approach focuses on the words surrounding the target word in an utterance – though words with similar meanings are also taken into account in FrameNet (see section 3.3.7).

The approach used in this dissertation also differs from the studies discussed above in that the data is taken solely from corpora, thus making it a usage-based approach. Data in the studies above were either taken from dictionaries or created by the author for the purpose of their work. Additionally, lexical field theory is typically a synchronic approach (though, again, Trier and Lehrer take a diachronic approach), whereas the study at hand examines the preposition *mit* both synchronically **and** diachronically in order to produce a more complete picture.

2.2.2 Componential Analysis

Developing out of lexical field theory, componential analysis is one of the prominent current methods in semantics. This method was also influenced by the Prague School's method of

[11] Additional studies which are relevant to semantic network models are: Lindner 1982 on the semantics of *in*/*out* and *up*/*down* and Lakoff's discussion of *over* in *Women, Fire, and Dangerous Things* (Lakoff 1987).

phonetic analysis, in which matrices of phonetic features are created and plusses and minuses are placed accordingly in order to illustrate the differences between phonemes (see Goodenough 1956 and Lounsbury 1956). In componential analysis, a matrix of **semantic** features is created in lieu of phonetic features, and lexical items replace phonemes. Geoffrey Leech, a major contributor to this approach, describes the approach as follows:

> Componential analysis is founded on the notion of semantic contrast: expressions are assumed to contrast simultaneously on different dimensions of meaning… or within different semantic systems. Components (or semantic features) are the factors, or contrastive elements, which it is necessary to posit in order to account for all significant meaning relations (Leech 1969: 20).

Marthe Philipp provides a thorough and insightful discussion of this semantic approach in the first chapter of her book *Semantik des Deutschen* (Philipp 1998). I begin discussion of componential analysis with one of Philipp's reduced matrices of componential analysis (figure 2.2) in which she discusses German words for travel paths or *Verkehrswege*:

	Seme	
Lexeme	**S1 'schmal'**	**S2 'geteert'**
Weg	∅	–
Pfad	+	–
Straße	–	+
Gasse	+	+

'geteert' steht für 'geteert', 'gepflastert' oder 'befestigt'[12]

Figure 2.2: A componential analysis of *Verkehrswege* ('travel paths') (Philipp 1998: 23)

As you can see, along the vertical axis are listed the lexical items to be examined in the matrix (here, the different travel-paths: *Weg, Pfad, Straße,* and *Gasse,* 'way', 'path', 'street', and 'alley', respectively),[13] while the horizontal axis shows the semantic features, called *semes,* (here, the two adjectives: *schmal* 'narrow' and *geteert* 'paved'). The symbols in the matrix indicate the following: ∅ signifies that the seme neither applies nor does not apply (here, for example, *Weg* can be narrow but does not have to be); – signifies that the seme does not apply (here, *Weg* is not paved); + signifies that the seme does apply (here, *Pfad* is narrow). As you may notice, this matrix closely resembles the matrices used by the Prague School in phonetic analysis, the only differences being the substitution of semantic features (semes) for phonetic features along the x-axis and the substitution of lexemes for phonemes along the y-axis.

So, how does one interpret this componential analysis matrix? Beginning at the top with *Weg*, we interpret the matrix as follows: a *Weg* may be narrow, but need not be, and is not paved; a *Pfad*

[12] *'paved' stands for 'paved', 'cobbled' or 'surfaced'*

[13] It should be noted that I have provided here what are probably the most common translation equivalents of these words; however, there are a number of translations depending on the context. For example, *Weg* can often be translated as 'path', *Gasse* as 'lane', etc.

must be narrow but is not paved; a *Straße* is not narrow but must be paved; and a *Gasse* must be both narrow and paved. As you can see, these lexemes are analyzed in terms of opposition and are distinct from one another in terms of the combination of their semes. Obviously, each of the lexemes has more semantic features, but they are not distinctive, thus irrelevant in this approach.

This matrix illustrates a basic example of the use of componential analysis. Philipp sees this method "nur als eine Methode der Fragestellung" (Philipp 1998: 17),[14] a sentiment with which I completely agree. This approach succeeds at illustrating the differences between words in the same lexical field; however, it is merely an illustration of comparison, not a complete semantic analysis.

Philipp mentions prepositions briefly in her discussion of orientation, but not actually with regard to componential analysis. Her intent here in discussing the semantics of prepositions lies in clarifying that orientation and directional opposition relies on the perspective of the speaker. (see Philipp 1998: 46–53).

Leech, however, dedicates an entire chapter to spatial prepositions. He begins the chapter with analysis of English *at*, *on*, and *in*, stating that they relate via contrasts in the system of DIMENSIONALITY (as discussed later on by Rice; see section 2.2.1 above). He defines these prepositions (only in their spatial senses) as follows (Leech 1969: 162):

at: →PLA [1DIME]
on: →PLA [2DIME]
in: →PLA [3DIME]

These definitions can be put in to prose and read as such: *At* denotes 'in the system of PLACE, no dimensions are relevant'; *on* denotes 'in the system of PLACE, one or two dimensions are relevant; *in* denotes 'in the system of PLACE, two or three dimensions are relevant'. Leech also comments that the object must not necessarily have X number of dimensions, but rather it is **perceived** to have X number of dimensions, stating "[t]hese categories obviously have more to do with the human apparatus of visual perception than with the objective physical properties of objects…" (Leech 1969: 162). Leech then defines the prepositions *away from*, *off*, and *out of*, which he indicates as "the negative of the relations expressed by *at*, *on*, and *in*" as such (Leech 1969: 163):

away from: ~→PLA [1DIME] 'not at'
off: ~→PLA [2DIME] 'not on'
out of: ~→PLA [3DIME] 'not in'

These definitions are problematic, firstly, as they depend upon the meanings of *at*, *on*, and *in* for their interpretation. Additionally, it is usually not meaningful to define something in terms of something it is not. Drawing from this idea, one could define *coffee* as 'not tea', but we would still not be able to comprehend the meaning of *coffee*. Lastly, there are too many symbols that need interpreting. It is no longer the norm for scholars, even semanticists, to have a deep

[14] "as merely one method of questioning"

understanding of this kind of mathematical notation. That being said, let us now take a look at another interpretation of *on*, i.e. in the sense of 'on top of' proposed by Leech (Leech 1969: 176):

$$on(top\ of)\text{: }\rightarrow\text{PLA}[2\text{DIME}] \cdot \theta' \langle\, \theta' \cdot [2\text{DIME}] \rightarrow\text{EXTS} + \text{VER} \rightarrow\text{PLUS}\ [3\text{DIME}] \cdot \emptyset \,\rangle$$

Let us attempt to unpack the meaning of this definition by first interpreting the information that Leech provides. We know that PLA means 'in the system of PLACE', [2DIME] means 'one or two-dimensional', and [3DIME] means 'two- or three-dimensional'. Leech also explains elsewhere the meanings of →EXTS ('is a spatial extremity of'), +VER (vertical), and →PLUS ('is over/in front of/to the left of'). This is all useful information in attempting to interpret this definition; however, without knowledge of the notation, we are at a loss and cannot interpret it.

It should be noted that these definitions above do not look much like the componential analysis I have described thus far. Leech's notation is much more mathematical, as you will continue to see below; however, he is still using semantic feature contrasts to define lexical items. I find this type of notation far too complex for semantic analysis, as one has to first interpret the notation in order to comprehend the analysis. It is an added and unnecessary effort when tables or figures offer a clearer explanation, as shown by Philipp's tables above. Leech does, however, in some places exclude the more esoteric mathematical symbols and use instead basic symbols such as plusses, minuses, and arrows, as in the following, making his notation much more reader-friendly (Leech 1969: 172):

over:	+VER →PLUS
under:	+VER ←PLUS
in front of:	–VER +PRI[15] →PLUS
behind:	–VER +PRI ←PLUS
to the left of:	–VER –PRI →PLUS
to the right of:	–VER –PRI ←PLUS

While componential analysis succeeds at highlighting the differences between lexical items in the same semantic field, it falls short in defining lexical items on their own because its primary aim is to describe the lexical items in terms of their similarities to and differences from other lexical items in the same semantic field. It relies upon lexical field theory, which, as discussed above (see section 2.2.1), contains a few critical issues. Furthermore, this type of analysis cannot be successful for prepositional analysis due to their highly polysemous nature, and, as Geeraerts states with regard to componential analysis and polysemy, "…the interest of structuralist semantics for the problem of polysemy has been limited… [the interest in polysemy] remained largely terminological: it was not accompanied by an investigation into the principles that govern semasiological polysemy" (Geeraerts 2010: 92). Leech **did** attempt to account for two different spatial meanings of *on*; however, the latter account is uninterpretable for one who is not well-versed in this type of mathematical notation and there are many more than two meanings of English *on*. In Geeraerts' criticism of componential analysis, he states "A strict implementation of the Saussurean view that languages have their own, non-encyclopedic conceptual structure seems to come at a price: that of a severe reduction of the descriptive scope of the theory… what

[15] +PRI means 'primary horizontal axis' and –PRI means 'secondary horizontal axis' (Leech 1969: 170). The difference between primary and secondary is not explained.

we are left with is the mere identification of oppositions in a restricted part of the lexicon" (Geeraerts 2010: 79–80).

Note that neither of the lexical semantic studies discussed above drew their data from authentic texts. Leech's work did attempt to account for the semantics of a handful of prepositions; however, as is characteristic of many preposition studies, he did not address non-spatial meanings of any of the prepositions. In contrast, this dissertation both uses corpus data, i.e. examples from authentic texts and handles the full semantic range of the preposition under consideration. Additionally, I attempt to make the analysis more easily interpretable (than Leech's) by avoiding the use of extensive mathematical notation and instead adopting FrameNet's reader-friendly notational system (discussed in section 3.3.7), though I do believe the compositional analysis as illustrated by Philipp (see Figure 2.2 above) is very easy to interpret.

2.3 Generative semantics

The generative semantic approach began in the early 1960s with a pivotal paper by Jerrold Katz and Jerry Fodor titled *The structure of a semantic theory* (Katz & Fodor 1963). In this paper, Katz and Fodor state their objective as a mere characterization of the form of a semantic theory, not actually a presentation of one. The rationality behind this they state as "Semantics suffers not from a dearth of facts about meanings and meaning relations in natural language, but rather from the lack of an adequate theory to organize, systematize, and generalize these facts" (Katz & Fodor 1963: 170).

In this work, Katz and Fodor establish four facets of native speaker abilities that must be resolved in an adequate theory of semantics: detection of non-syntactic ambiguities; exploitation of sentential semantic relations in order to eliminate ambiguity; detection of semantic anomalies, and; the ability to paraphrase (Katz & Fodor 1963: 175). To achieve this, the authors propose two mechanisms: a dictionary and a set of rules for applying dictionary information.

The dictionary which Katz and Fodor propose consists of two sections: a grammatical section (for part of speech classification) and a semantic section (for distinct senses of the word). An example of this type of dictionary entry is shown in figure 2.3 below.

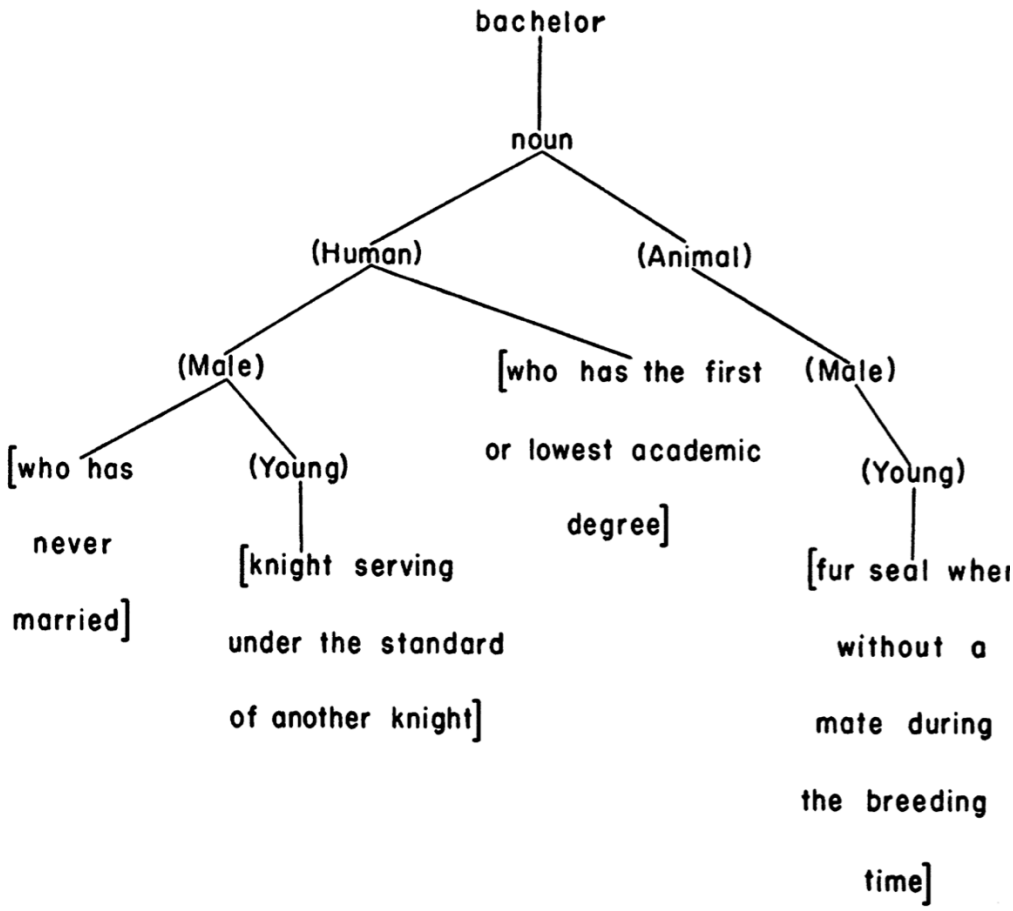

Figure 2.3: Katz & Fodor's example dictionary entry for the English word *bachelor* (Katz & Fodor 1963: 190)

Beginning at the top of figure 2.3, the initial line displays the word in question. The next level down displays the *grammatical marker*, i.e. syntactic category of the lexical item. The terms below the grammatical marker in parentheses are what Katz and Fodor call the *semantic markers* and the text in brackets are called *distinguishers*. The authors describe each of these concepts as follows:

> Semantic markers are the elements in terms of which semantic relations are expressed in a theory. Here there is a strong analogy to grammatical markers, since a grammatical marker (Noun, Verb, Adjective, etc.) is an element in terms of which syntactic relations are expressed. The semantic markers assigned to a lexical item in a dictionary entry are intended to reflect whatever systematic semantic relations hold between that item and the rest of the vocabulary of the language. On the other hand, the distinguishers assigned to a lexical item are intended to reflect what is idiosyncratic about its meaning. Generally speaking, a change in the system of semantic markers has extensive consequences throughout the semantic theory, i.e. such a change radically alters the semantic relations which the theory claims to find between indefinitely many words in the language. But a

> change in a distinguisher merely alters the relation between one item and its synonyms (Katz & Fodor 1963: 187).[16]

In short, semantic markers are systematic and show relationships between other lexical items in a language, thus a change in a semantic marker would mean a change in the whole semantic system of a language; whereas distinguishers are idiosyncratic and a change to a distinguisher would only affect the particular lexical item in question.

This type of dictionary entry proposed by Katz and Fodor would easily account for lexical ambiguity by the branching of distinct senses as seen in figure 2.3 above, but accounting for sentential ambiguity is a bit more complex. The authors reference the following sentences to explain how a semantic theory should account for sentential ambiguity:

> (5) The stuff is light.
> (6) The stuff is light enough to carry.

In sentence (5), the adjective *light* is ambiguous between a description of shade or hue and a description of weight; however, in sentence (6), it is clear that the interpretation of *light* should be a description of weight. With regard to this, Katz and Fodor state that a semantic theory:

> … must be able to determine every case in which a sentence containing ambiguous lexical items is itself ambiguous and every case in which selection resolves the ambiguities. But this, in turn, amounts to accepting the condition that a dictionary must be so constructed that every case of lexical ambiguity is represented by polyadic branching and that every case of selection can be represented as the exclusion (by some sentence material) of one or more branches (Katz & Fodor 1963: 188).

With this quote, they have addressed the first two facets of native speaker abilities that must be addressed in a semantic theory, namely detection of non-syntactic ambiguities and exploitation of sentential semantic relations in order to eliminate ambiguity. They continue on by addressing the third facet (detection of semantic anomalies), stating "Semantic anomaly can then be construed as the limiting case of selection: the case where there is a lexical item in a sentence whose paths are ALL excluded by selections due to other material in the sentence" (Katz & Fodor 1963: 188). The fourth facet, ability to paraphrase, will be addressed toward the end of this discussion, as the authors treat it toward the end of their paper.

The second mechanism of a semantic theory that Katz & Fodor propose is a projection rule component of a semantic theory. This component essentially works as follows: The dictionary component is used as input for the instructions (I) in order to apply it to the projection rules.[17] Rules are then applied to a "constituent structure tree" from the bottom up, resulting in "a series

[16] It should be noted here that this analysis is precisely the analysis that Fillmore dismantles in his 1965 paper titled "Entailment rules in a semantic theory".

[17] The authors include a very detailed figure as to exactly how the dictionary component and projection rule component interact. For the purpose of space, I will not go into details about this here, but rather assume that the way in which the two mechanisms interact is valid. For specifics on exactly how this is achieved see Katz & Fodor 1963: 193–196.

of amalgamations" (Katz & Fodor 1963: 197). In order to illustrate this, the authors use as an example the sentence *The man hit the colorful ball*. Semantic analysis begins with the output of (I) – again, here we are assuming their method of relating the dictionary component and the projection rule component is valid – which results in the tree shown in figure 2.4 below.

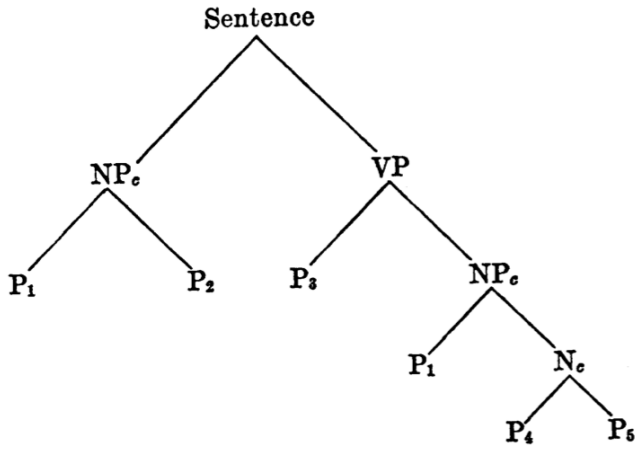

Figure 2.4: Katz & Fodor's constituent structure tree for the sentence *The man hit the colorful ball* (Katz & Fodor 1963: 197)

From here, the authors explain:

> It [the projection rule component] starts with the output of (I) [figure 2.4 here] and amalgamates sets of paths dominated by a grammatical marker, thus assigning a set of readings to the concatenation of lexical items under that marker by associating the result of the amalgamation with the marker, until it reaches the highest marker 'Sentence' and associates this with a semantic interpretation. The projection rules amalgamate sets of paths dominated by a grammatical marker by combining elements from each of them to form a new set of paths which provides a set of readings for the sequence of lexical items under the grammatical marker. Amalgamation is the joining of elements from different sets of paths under a given grammatical marker if these elements satisfy the appropriate selection restrictions represented by the material in angels (Katz & Fodor 1963: 197).

The authors continue, noting that one could start either with the amalgamation of P_1 and P_2 or the amalgamation of P_4 and P_5. I will show as an example the way in which the authors amalgamate P_4 and P_5 only, as the process merely repeats itself up the constituent tree until it reaches S. Before amalgamating P_4 and P_5, the paths must be spelled out individually, as shown in figure 2.5 below.

P_4

1. *Colorful* → Adjective → (Color) → [Abounding in contrast or variety of bright colors] ⟨(Physical Object) v (Social Activity)⟩
2. *Colorful* → Adjective → (Evaluative) → [Having distinctive character, vividness, or picturesqueness] ⟨(Aesthetic Object) v (Social Activity)⟩

P_5

1. *Ball* → Noun concrete → (Social activity) → (Large) → (Assembly) → [For the purpose of social dancing]
2. *Ball* → Noun concrete → (Physical Object) → [Having globular shape]
3. *Ball* → Noun concrete → (Physical Object) → [Solid missile for projection by an engine of war]

Figure 2.5: The paths comprising the sets P_4 and P_5 (Katz & Fodor 1963: 198)

The information after each number in figure 2.5 above illustrates the dictionary entries of the two lexical items *colorful* and *ball*. As you can see in the figure, each of these lexical items' ambiguity is elucidated. Because there are two distinct senses of *colorful* and three distinct senses of *ball*, there are six possible amalgamations of P_4 and P_5. However, upon amalgamating the two, some interpretations are eliminated due to the selection restrictions of *colorful* (in angled brackets). The projection rule to amalgamate the two paths is proposed by the authors as follows:

> (R_1) Given two paths of the form: (1) Lexical String$_1$ → syntactic markers of head → (a_1) → (a_2) → … → (a_n) → [1] ⟨set of string markers Ω_1⟩; (2) Lexical String$_2$ → syntactic markers of modifier → (b_1) → (b_2) → … → (b_m) → [2] ⟨set of string markers Ω_2⟩, such that there is a substring σ of the string of syntactic or semantic markers and σ satisfies the condition Ω_2. There is an amalgam of the form: Lexical String$_2$ + Lexical String$_1$ → dominating node marker → (a_1) → (a_2) → … → (a_n) → (b_1) → (b_2) → … → (b_m) → [[2][1]] ⟨Ω_1⟩, where any (b_i) is null when ($\exists a_i$) ($b_i = a_i$) and [[2][1]] is [1] when [2] = [1] (Katz & Fodor 1963: 198).[18]

The authors fail to put into prose the complex notation used in R_1, thus my understanding of it may not completely accurate. The key information that I gathered from this is the following: Everything listed under the number (1) in (R_1) corresponds sequentially with P_4 illustrated in figure 2.5 above, i.e. 'Lexical String$_1$' refers to the lexical item *colorful*; 'syntactic markers of head' refers to *Adjective*; (a_1), (a_2), etc. refer to the semantic markers 'Social activity', 'Large', etc.; '[1]' refers to the distinguisher 'for the purpose of social dancing', and; ⟨set of string markers Ω_1⟩ refers to the selection restrictions 'Physical Object' and 'Social Activity'. Likewise, everything listed under (2) corresponds sequentially with P_5 illustrated in figure 2.5. The two paths then amalgamate where possible, i.e. where selection restrictions are not triggered.

[18] The authors discuss the use of formal language such as this earlier on in the paper. They argue for using such language, stating "the question what semantic interpretation is assigned to a given sentence can be answered by formal computations without the aid of linguistic intuitions or insights" and that "A semantic theory is vacuous to the extent that the speaker's intuitions or insights about semantic relations are relied on in order to apply the rule of the theory correctly (Katz & Fodor 1963: 192). I disagree with such formalism, as in my opinion it adds extra burden to the reader in that they must first interpret the notation before being able to comprehend the analysis.

The process of the amalgamation of P_4 and P_5 results in the set of derived paths P_6 as shown in figure 2.6 below. The reader should note that out of the six possible combinations of P_4 and P_5, only four paths are derived because of the selection restrictions in P_4.

P_6

1. *Colorful* + *ball* → Noun concrete → (Social Activity) → (Large) → (Assembly) → (Color) → [[Abounding in contrast or variety of bright colors] [For the purpose of social dancing]]
2. *Colorful* + *ball* → Noun concrete → (Physical Object) → (Color) → [[Abounding in contrast or variety of bright colors] [Having globular shape]]
3. *Colorful* + *ball* → Noun concrete → (Physical Object) → (Color) → [[Abounding in contrast or variety of bright colors] [Solid missile for projection by an engine of war]]
4. *Colorful* + *ball* → Noun concrete → (Social Activity) → (Large) → (Assembly) → (Evaluative) → [[Having distinctive character, vividness, or picturesqueness] [For the purpose of social dancing]]

Figure 2.6: P_6, the amalgam of P_4 and P_5 (Katz & Fodor 1963: 199)

While the notation of the rule is too complex in my view, the result of (R_1) as applied to P_4 (*colorful*) and P_5 (*ball*) shown above in figure 2.6 is clear and accurate. It shows that the combination of P_4 and P_5 results in four different interpretations of the noun phrase *colorful ball,* namely: a social dance with bright colors, a round object with bright colors, a missile with bright colors, and a social dance with distinctive character.

The process of amalgamating paths then proceeds up the tree illustrated in figure 2.4 until reaching S where all possible interpretations of the sentence are listed. The end result of these amalgamations is four possible interpretations of the sentence *The man hit the colorful ball* as follows: an adult male collides with a round object that is brightly colored; an adult male collides with a missile that is brightly colored; an adult male strikes with a blow a round object that is brightly colored, and; an adult male strikes with a blow a missile that is brightly colored.[19] While I agree that each of these are indeed interpretations of the sentence *The man hit the colorful ball*, I believe there needs to be a way in which the most plausible interpretation, i.e. that an adult male strikes with a blow a round object that is brightly colored – given the sentence in isolation – somehow has more weight than the others. The authors do not address this at all in the article.[20]

Returning to the fourth facet of a speaker's ability, the ability to paraphrase, Katz & Fodor state:

> Suppose we… introduce the convention that any sentences related by such a transformation T [a meaning-preserving transformation] belong to an equivalence class all of whose members receive the same semantic interpretation. Then the facts that there will always be a kernel sentence in such an equivalence class and that every kernel

[19] For further detail on exactly how the authors reach this result see Katz & Fodor 1963: 201–205.
[20] Though they do express their stance on context early on in the article, stating that setting or context should not be part of a semantic theory (Katz & Fodor 1963: 173–174).

> sentence has a semantic interpretation on the basis of type 1 projection rules [rules such as (R_1)] mean that every non-kernel sentence in such an equivalence class automatically receives the semantic interpretation of its kernel co-member, which makes them all paraphrases as desired (Katz & Fodor 1963: 206–207).

In short, regarding the ability to paraphrase, the authors propose some type of class of sentences (T) which would receive the same semantic interpretation. This treatment would include passive constructions and sentences in which word order does not affect meaning.

Katz and Fodor's work here is groundbreaking in that it clearly states that a syntactic theory alone is insufficient for linguistic analysis and that a theory of semantics must be developed in order to properly analyze language. It does a great job with sentential semantic analysis, that is, the results of the amalgamations discussed above do result in accurate interpretations; however, there are a few critical points I would like to note. First of all, the authors do not use authentic data in their analysis, but rather fabricate sentences in order to show how the theory would work.[21] Secondly, while it may be useful in computation, the use of formal language can often be a stumbling block for readers, as they must first interpret the formalisms (which are often not clearly explicated) before they can begin to interpret the data. And finally, the authors view that sentences should be analyzed in isolation, that is, without regard to context or setting, does not reflect the real world. By this I mean that we, as speakers of language and experiencers of the world, do not separate language utterances from the context in which we consume them; therefore, it would be unwise of us to claim that semantic analysis be conducted without consideration of our surroundings.

Let us now turn to an application of the generative semantic approach to prepositions by Manfred Bierwisch (Bierwisch 1988). It should be noted that Bierwisch does not actually follow Katz and Fodor's structure of a semantic theory, but rather he uses set theory in order to illustrate his semantic analysis. Bierwisch states the primary concern of the paper as examining the manner in which locative prepositions "are combined in a modular approach that tries to capture the interaction of independently motivated syntactic and semantic components and principles of structural organization" (Bierwisch 1988: 1). In this study, the author does consider the syntactic category of prepositions as semantic load bearing, though he also alludes to some issues with this stance. Following the generative syntax tradition, Bierwisch characterizes prepositions as [-N, -V] (N representing noun and V representing verb). His study is only applicable to locative prepositions, thus the non-locative senses of these prepositions are not considered here. Because he examines most of the locative prepositions of German, he proposes a grammatical feature [± Dir(ectional)] which distinguishes path from place prepositions. He states:

> [± Dir] must be considered as a grammatical feature on a par with features of Case, Number, Gender, Tense etc. Grammatical features may, but need not, correlate with semantic properties, and even if they do, they define grammatical properties that must be kept separate from semantic ones (Bierwisch 1988: 2).[22]

[21] I do recognize again, however, that their intent with this paper was not to establish an entire semantic theory, but rather to show that one is needed and suggest certain mechanisms that might work.

[22] Following Katz and Fodor's proposals discussed above, it might be more appropriate to interpret this feature as a semantic marker.

Thus, on that account, he proposes a feature complex of locative prepositions as [-N, -V, **α** Dir].

As generative semantics concerns itself with linking semantics to a theory of generative syntax, Bierwisch discusses at length the manners in which these locative prepositions – together with their semantics – can link up with the syntactic trees of X-bar theory. I will not delve into a discussion of this here, as I am primarily concerned with the semantics of prepositions in this dissertation. What is pertinent are the lexical entries Bierwisch suggests for the prepositions. He proposes lexical entries for a number of prepositions in his paper, but I will examine only one as a sample, namely the entry for German *in*.[23] Bierwisch proposes the following:

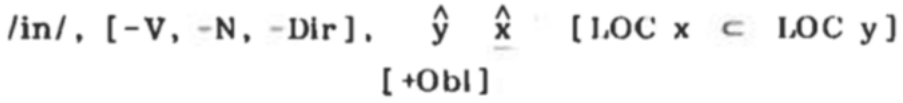

Figure 2.7: Bierwisch's lexical entry for German *in* (Bierwisch: 1988: 34)

He then constructively describes the meaning of this entry in prose as such:

> A locational P assigns to both its internal and its external argument a place and specifies a particular relation between these places, in the case of *in* simply (improper) inclusion. Hence *an* and *unter* would have entries that differ from (84) [figure 2.7 here] only by the occurrence of AT and BELOW instead of ⊂, where AT and BELOW correspond to 'at' and 'below' as in (73) and (74) [figure 2.5 here], respectively (Bierwisch 1988: 34–35).

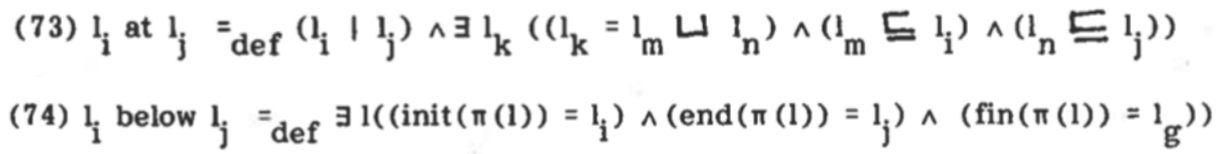

Figure 2.8: Bierwisch's definitions of *at* and *below* (Bierwisch 1988: 31)

Regarding interpretability, figure 2.7 is passable, especially due to the prose explanation Bierwisch provides. Figure 2.8, on the other hand, is completely unintelligible to one who does not have an extensive knowledge of set theory. Bierwisch does – though very briefly – explain these operators earlier on in his paper (see Bierwisch 1988: 19); however, not extensively enough for the reader without knowledge of set theory to be able to interpret the meaning of the expression shown in figure 2.8. The notation is incredibly tedious and makes the proposed method of semantic analysis inaccessible to the reader who does not possess extensive knowledge of set theory. A theory of semantics need not include such formalizations in order to be a valid theory. There are more accessible approaches to semantic notation that can more clearly explicate the semantics of a particular lexical item and I strongly believe these more accessible approaches be advocated for, so as not to make semantic theory inaccessible. In short, while Bierwisch's approach to analyzing the semantics of prepositions may in fact work well, the formalisms are far too difficult to interpret and, without a prose explanation as to how the formalisms are to be understood, the reader may be left rather disoriented. I would also like to

[23] Most often translated into in English as *in*.

point out that, once again, the author does not use any authentic data when analyzing the prepositions in question, but rather constructed examples that fit where needed.

While generative semantics was an insightful phase in semantic analysis, as it reestablished an interest in the psychological aspect of semantics and showed that one could and should incorporate lexical meaning into a formal grammar, its application to prepositions draws a major point of criticism mentioned above: The mathematical notation is a deterrent and an obstacle. Again, many scholars today are not versed in such complex mathematical syntax and I believe many would agree that there must be a simpler form of notation than, for example, the one used in figure 2.8. In addition to this, Geeraerts notes that symbolic logic was "enthusiastically adopted by the Generative Semantics movement… But the Generative Semantics way of using logic was very creative (or idiosyncratic, perhaps)" (Geeraerts 2010: 107), which may be a more polite way of implying that the notation was up for interpretation, thus not entirely systematized. Furthermore, this approach, along with others discussed earlier on in this chapter, does not use authentic data, but rather fabricated examples of language use, thus it is not a usage-based approach. Additionally, there are no studies to my knowledge on any non-spatial senses of prepositions using the generative approach.

2.4 Contemporary non-structuralist semantics

This section addresses two prominent contemporary approaches to semantics, namely Anna Wierzbicka's Natural Semantic Metalanguage (henceforth denoted as NSM) and Ray Jackendoff's Conceptual Semantics. While these are often not categorized as cognitive approaches, there are clearly cognitive elements to each of them, thus a discussion of them will serve as a fitting segue into the next chapter on cognitive approaches to semantic analysis. Geeraerts even states in his chapter entitled "Neostructuralist Semantics" in which these topics are examined, that "most of the theories treated in this chapter exist parallel to the cognitive semantics movement" (Geeraerts 2010: 126). His chapter also includes Bierwisch's Two-level Semantics and Pustejovsky's Generative Lexicon. I will not discuss these theories here for two reasons: First, they do not seem to be as prevalent as NSM and Conceptual Semantics; second, there are no studies on prepositions using these approaches as far as I know. Additionally, the notation used in these two approaches is complex: Bierwisch's notation is comparable to that which he proposed in his 1988 study on locational prepositions (cf. section 2.3), and Pustejovsky uses something of a computational model.[24]

2.4.1 Natural semantic metalanguage (NSM)

NSM is an approach conceived of by Anna Wierzbicka. Together she and her colleague, Cliff Goddard, have researched and published a number of works on this topic. In this section, I discuss the basic principles of this approach in addition to Goddard's examination of the spatial sense of the English preposition *on*.

[24] See Geeraerts 2010 pp.147–156 or Pustejovsky 1995 for further details.

NSM is a reductionist approach which attempts to pare down the meanings of lexical items to a set of universal primitive meanings, called 'semantic primes' (referred to as 'semantic primitives' in earlier versions). The approach uses 'reductive paraphrase' to create lexical entries. Geeraerts describes reductive paraphrase succinctly as "basically, writing definitions couched in the vocabulary of universal primitive concepts" (Geeraerts 2010: 129). An example of this is illustrated and discussed further on in this section.

Wierzbicka begins her 1995 article, *Universal semantic primitives as a basis for lexical semantics* as follows:

> The meanings of words are like objects constructed out of various Lego blocks. The purpose of lexical semantics is to study such objects, to deconstruct them into their constitutive building blocks, and to seek generalizations about the different types of building blocks and different ways of putting them together (Wierzbicka 1995:149).

Wierzbicka proposes the notion of *semantic primitives*, originally presented in her book *Semantic primitives* (Wierzbicka 1972), but further revised since then. She even develops this theory further by proposing **universal** semantic primitives, which she describes as fundamental human concepts: some examples of these she cites are *something, someone,* and *want*. Together, she and Goddard edited a work called *Semantic and lexical universals* (Goddard & Wierzbicka eds. 1994) in which a systematic study was conducted on languages from different language families on multiple continents. The study identified the following words (or bound morphemes) from each language as proposed universal primitives: *I, you, someone, something, where, when, big, small, good, bad, do,* and *happen*. Goddard and Wierzbicka claim that when uttering a sentence using only semantic primitives, one can translate it into another language without any loss or addition of meaning. The NSM website includes a chart of semantic primes or primitives grouped by category (figure 2.9).

Semantic primes (English exponents)

I, YOU, SOMEONE, SOMETHING~THING, PEOPLE, BODY	substantives
KINDS, PARTS	relational substantives
THIS, THE SAME, OTHER~ELSE	determiners
ONE, TWO, SOME, ALL, MUCH~MANY, LITTLE~FEW	quantifiers
GOOD, BAD	Evaluators
BIG, SMALL	Descriptors
KNOW, THINK, WANT, DON'T WANT, FEEL, SEE, HEAR	mental predicates
SAY, WORDS, TRUE	speech
DO, HAPPEN, MOVE	actions, events, movement
BE (SOMEWHERE), THERE IS, BE (SOMEONE/SOMETHING)	location, existence, specification
(IS) MINE	possession
LIVE, DIE	life and death
WHEN~TIME, NOW, BEFORE, AFTER, A LONG TIME, A SHORT TIME, FOR SOME TIME, MOMENT	time
WHERE~PLACE, HERE, ABOVE, BELOW, FAR, NEAR, SIDE, INSIDE, TOUCH	place
NOT, MAYBE, CAN, BECAUSE, IF	logical concepts
VERY, MORE	augmentor, intensifier
LIKE	similarity

Notes: ▪ Exponents of primes can be polysemous, i.e. they can have other, additional meanings. ▪ Exponents of primes may be words, bound morphemes, or phrasemes. ▪ They can be formally, i.e. morphologically, complex. ▪ They can have combinatorial variants or allolexes (indicated with ~). ▪ Each prime has well-specified syntactic (combinatorial) properties.

Figure 2.9: Proposed universal semantic primes (Natural semantic metalanguage)

For Wierzbicka, "lexical semantics has two main tasks: describing the meaning of words within one language and comparing the meanings of words in different languages" (Wierzbicka 1995:165), and this is exactly what she does in her work – the latter of which is often omitted in other semantic approaches. In this regard, Wierzbicka advances lexical semantics further than many semanticists by investigating semantic universals. This dissertation does not examine semantic universals, thus this concept is irrelevant here; however, Wierzbicka's work in this area is groundbreaking and worth the mention.

Let us now take a look at the application of NSM. Wierzbicka claims that each lexical item can be described in terms of semantic primes (shown in figure 2.9 above) and molecules (denoted by *[m]*). Keeping in mind this list of semantic primes, let us now consider the NSM analysis of the English word *mice*:

mice:

CATEGORY

a. animals [m] of one kind

WHERE THEY LIVE

b. animals [m] of this kind can live in people's homes [m]
they can live in places near people's homes [m]
sometimes there can be many animals [m] of this kind in one place

SIZE

c. animals [m] of this kind are small
if someone wants, this someone can hold [m] one in one hand [m]

BODY

d. the body of animals [m] of this kind is like this:
- when someone sees it, this someone can think that it has two parts
- the head [m] is part of one of these two parts, the other part of these two parts is a long [m] thin [m] tail
- the front [m] part of the head [m] is pointed [m]
- animals [m] of this kind have small round [m] ears [m] on two sides of the top [m] of the head [m]
- they have small hairs [m] near the mouth [m], these hairs [m] stick out [m] on two sides of the front [m] part of the head
- they have small sharp [m] teeth [m]
- they have very small legs [m], when they move people can't see their legs [m]

BEHAVIOUR

e1. often when animals [m] of this kind are doing things in a place, people in this place cannot hear anything because of it
- they can move quickly [m]
- sometimes when they move in a place, people in this place can hear something of one kind like people can hear at other times, if someone's fingernails [m] move when they are touching something hard [m]
- at some times, animals of this kind [m] can be inside a small hole [m] in a place

SOUND

e2. at some times when animals [m] of this kind feel something,
they do something for some time with the mouth [m]
if someone is very near the place where these animals [m] are at that time,
this someone can hear something of one kind because of it
when people hear this, they can think that these animals [m] feel
something bad like someone can feel when this someone thinks that
something very bad can happen to this someone's body after a short time

RELATION TO PEOPLE

f. people don't want animals [m] of this kind to live in their homes [m],
because they can do bad things in their homes [m]
if many animals [m] of this kind live in people's homes [m], it can be very bad
for these people, because in many people's homes [m] it is like this:
– things of many kinds are in some places in these homes [m] because
these people want this
– they want this because they want to eat [m] these things afterwards
– animals [m] of this kind want to eat [m] the same things
because of this, when many animals [m] of this kind live in a place, people in
this place often do some things with things of one kind because they want
to kill [m] these animals [m]
sometimes these people want an animal [m] of another kind to live in the
same place because an animal [m] of this other kind can kill [m] animals
[m] of this kind

HOW PEOPLE THINK ABOUT THEM

g. many people think about animals [m] of this kind like this:
'at all times when they are in a place, animals [m] of this kind want
other creatures [m] not to know that they are in this place
they want this because they don't want something bad to happen to
them'

Figure 2.10: Goddard NSM analysis of the English word *mice* (Goddard 2011: 210–211)

In order to interpret this explication for *mice*, we must first address the concept of semantic molecules. Goddard defines semantic molecules as "non-primitive meanings that function, alongside the semantic primes, as conceptual building blocks in the meaning structure of other, yet more complex words" (Goddard 2011: 71). At that time, he stated that research on semantic molecules was still at an early stage; however, the NSM website (Natural semantic metalanguage) now includes a description of semantic molecules, stating:

> These are non-primitive meanings (hence, ultimately decomposable into semantic primes) that function as units in the semantic structure of other, yet more complex words… It has to be stressed that whether or not a given word-meaning is a semantic molecule is an empirical issue, it is not arbitrary or a matter of convenience. The sole criterion is semantic necessity, and this can only be determined by detailed semantic analysis… Research into semantic molecules is still at a relatively early stage, with many interesting research questions as yet unanswered (Natural semantic metalanguage).

As the website states, the concept of a semantic molecule is still being researched, thus it is difficult to determine the validity of this concept at this time. It does seem to be crucial to the NSM approach, so a more detailed explanation of this concept is desired.

Wierzbicka & Goddard's approach to semantics is well-founded in that it is a very precise and uniform approach; however, it is an incredibly lengthy and complex process, a fact Goddard addresses stating that "human society and culture are immensely complex, and it makes perfect sense that much of human language should be so too" (Goddard 2011: 236). This statement seems to cross over into a cognitive approach, as it implies that human language is enveloped in human experience. Geeraerts discusses a couple criticisms of this approach, one of them being that NSM definitions are not checked against actual language use. He states:

> If the definitions are supposed to be generally applicable to all instances in which a word is used, it should be checked rigorously, on the basis of a broad sample of actual language use, whether the features that are mentioned as being universal within a concept indeed apply to all the relevant cases; if they do not, it should be checked whether the remaining features are sufficient to distinguish the concept from others (Geeraerts 2010: 135).

He then briefly summarizes an empirical test that he himself conducted (Geeraerts 1993) on Wierzbicka's NSM definition of the lexical item *fruit*. He found that there were a couple statements in the definition that did not apply to all fruit, but upon removing the problematic ones, the remaining statements were sufficient in distinguishing the concept of fruit from other concepts.

Regarding an NSM approach to prepositions, Goddard published a study (Goddard 2013) on English locative constructions using the preposition *on*. He begins his article citing the "extreme polyfunctionality" of English *on* and stating:

> … many linguists have concluded that it is impossible to identify a finite number of discrete semantic constructions [of *on*]: the only general semantic analysis, they think, must be an extremely abstract one, and to the extent that separate senses can be identified, they must have fuzzy boundaries (Goddard 2013: 153).

His argument is that different usages can be analyzed into constructional meanings. The construction he is concerned with in this study is English [*on* + NP_{PLACE}], i.e. prepositional phrases such as *on the beach*, *on the bank, on an island, on the corner*, etc. He proposes six different constructions and claims that "the semantics of this set of expressions is grounded in 'laterality'" (Goddard 2013: 155). I will not include a discussion of all six constructions, as the point here is merely to demonstrate an NSM analysis of a preposition. Instead, I will focus on three examples in order to get a sense of how this approach accounts for polysemy in addition to its approach to prepositional analysis.

The first sense of *on* that Goddard discusses serves as the basis for the rest of the constructions. This is the sense he labels "pure laterality" (Goddard 2013: 155). In order to set the stage for his analysis, it is important that we understand the foundation of the analysis which he states as follows:

> … we must treat a usage of English *on* which, paradoxical as it may sound, is non-meaningful. It concerns the "laterality" semantic prime, which has its English lexical exponent in the word SIDE… the prime SIDE is inherently relational, i.e. it requires a relatum (a "landmark", in cognitive grammar terminology)…the relatum SIDE must always be accompanied by a specifier. In the NSM metalanguage, one cannot speak of something being simply **on side* of something else: it must be *on one side, on this side, on the same side, on all sides*, etc. This combinatorial property of SIDE is regarded in NSM theory as part of the inherent conceptual grammar of laterality… (Goddard 2013: 155).

Goddard states that this usage of English *on* is "non-meaningful" and justifies this claim by stating that it "conveys no paraphrasable semantic content" (Goddard 2013: 155). His point with these claims is that *on*, in this sense, is only meaningful when combined with a lexical item that relates the semantic prime of "laterality".

Building upon this argument, Goddard outlines another usage of English *on,* namely the usage displayed in the phrases *on the top*, *on the bank*, and *on the edge*. He describes this type of usages as follows:

> These usages can be attributed to the presence of the semantic component ON ONE SIDE in the meanings of *top*, *bottom*, *bank*, *edge*, etc. … words like these designate a place which is part of some other place; and furthermore, which is construed as "laterally oriented" in respect of this other place, i.e. as being ON ONE SIDE of all the other parts of the main place in question (Goddard 2013: 156).

He then goes on to illustrate what the NSM approach to this usage of *on* looks like using the example *on top of the mountain* (figure 2.11 below).

[A] *on$_A$ top of the mountain:*

a. in a place

b. this place is part of another place (i.e. the mountain),
this place is on one side of all the other parts of this other place
this place is above all the other parts of this other place

Figure 2.11: NSM explication of *on* in the "laterally oriented" sense (Goddard 2013: 156)

One critical point that jumps out immediately is the usage of the lexical item itself in section b, i.e. "this place is on one side…". It seems as though this description of *on* is actually a focused description of the lexical item *top*. If we read the description as such, it is easy to see how Goddard believes that *on* is meaningless by itself and requires a lexical item expressing laterality, as he believes that *on* must be analyzed together with the lexical item *top* in order to achieve a meaningful definition. I believe this to be a valid argument because the phrase *on top of*, just as its counterpart *on the bottom of*, is a complex prepositional phrase which has multiple layers of meaning that all contribute to the meaning of the phrase as a whole. And Goddard's definition here analyzes the semantics that both *top* and *of* contribute to the phrase; however, he does not actually deconstruct it down to the meaning of *on*. He argues, rather, that *on* is

meaningless in this sense. *On*, however, **does** contribute its own semantics to the phrase *on top of*. This becomes clear if one considers the semantics of the same phrase substituting another preposition for *on*, such as *by*. Consider a figure in the two situations: *on the top of the mountain* and *by the top of the mountain*. The top of the mountain is consistent in both examples; however, the placement of the figure is different. Yet, if we reread the definition of *on the top of the mountain* that Goddard proposes, it still fits for *by the top of the mountain*, thus this definition is insufficient in breaking down the semantics of *on*, though it does succeed in analyzing *the top of*.

Considering one more example usage of *on* in Goddard's examination, we see the same issue, i.e. that the lexical item *on* is not considered on its own, but rather only in connection with the two noun phrases surrounding it, i.e. the entity and the locative noun. This sense of *on* is illustrated by the phrases *a house on the beach*, *on the town square*, and *on the river*. He observes that, "…roughly speaking, the landmark NP must have *sides* – either by virtue of being a clearly delineated areas, as in…[on the beach, on the town square, on the coast, on the seafront]…or by being a "linear" feature such as a river, road, or border" and that this construction "situates one place in relation to another" (Goddard 2013: 157). I agree with his assessment here, but let us now consider his analysis of *on* in this sense:

[B] *(place-X) is on$_B$ place-Y* =>

a. place-X is near place-Y, on one side of place-Y

b. because of this, people can think about these two places like this:

"when someone is in one of these places, this someone can see the other place"

Figure 2.12: NSM explication of *on* in the "situated" sense (Goddard 2013: 158)

As you can see, this analysis suffers from the same issues as the previous one, namely that *on* is used in the analysis, thus this analysis is not focused on the semantics of *on* itself, but rather its surrounding lexical items. Again, we can replace *on* with the lexical item *by* and the analysis would not need to be changed at all. Another matter to be considered here is part b of the analysis in which a person's cognition of the two surrounding noun phrases is stated. The first question that arises here is, why is this part of this analysis and not part of the previous one? Consistency is vital when devising any kind of analysis, and these two analyses are inconsistent with one another. The second – and more complicated – question is, what does this actually add to the analysis? The NSM approach employs this tool in many semantic analyses; however, as Geeraerts rightly points out, these definitions have not been tested on people (Geeraerts 2010: 133), nor have they been rigorously tested against actual language use (Geeraerts 2010: 135), thus these statements about how people think about X are difficult to give credence to.

To conclude the discussion of the NSM approach, I will say it is a unique and for the most part systematic approach; however, based on Goddard's analysis of the locative sense of *on*, I do not believe this to be the best approach to systematically interpret the senses of a given preposition, for two reasons: First, as shown above in figures 2.11 and 2.12, these sample analyses given by Goddard both use the preposition under examination in the explication, a method with which I disagree; Second, the analyses shown in figures 2.10 and 2.12 both allude to what people think. This would be problematic for my study, as I cannot prove what people think with the method I have chosen, nor would I be able to gain access to native speakers of Old High, Middle High, or

Early New High German (for obvious reasons!). Additionally, as is the case with other previously discussed approaches in this chapter, the NSM approach lacks both authentic data and examination of non-spatial prepositional meanings.

2.4.2 Conceptual semantics

Though, like NSM, Conceptual Semantics borders on a cognitive approach, I am including it here as it still involves generative grammar concepts. Ray Jackendoff conceived of this approach to semantic analysis and developed it throughout the years. Geeraerts provides a concise introductory explanation of Jackendoff's perspective, stating:

> … the formal semantic representation does not contain all the information that is relevant to explain the language user's conceptual competence. Rather, that information is to be situated on the level of 'conceptual structure'; within such conceptual structures, other modes of cognition, like perceptual knowledge and motor schemas, may play their role together with linguistic knowledge… Conceptual structure, in other words, acts as an interface between the formal structures of language and other, non-linguistic modes of knowledge (Geeraerts 2010: 138).

Jackendoff himself refers to his conceptual structure as a "syntax of thought" (Jackendoff 1991: 10). He further explains, "[s]ince conceptual structure serves as the form of linguistic meaning, there must also be a set of *correspondence rules* that relate it to syntactic representations, which permit the expression of meaning" (Jackendoff 1991: 10). His complete system is depicted in figure 2.13 below.

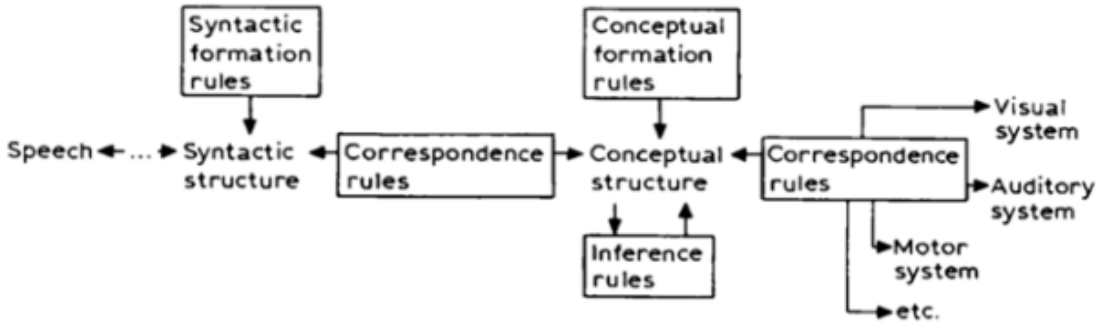

Figure 2.13: Jackendoff's theory of Conceptual Semantics (Jackendoff 1991: 11)

As you can see from the figure above, this theory takes into account not just the semantics (i.e. the conceptual structure) of a lexical item, but also the syntactic structure and the relevant processing systems (i.e. visual, auditory, motor, etc.) and links them together via correspondence rules (i.e. manners of interaction).

Let us now consider the notation used in conceptual semantics. Jackendoff provides many examples of analyses of complete sentences, but because my study concentrates on the lexical semantics of prepositions, I will focus on his (rather brief) analysis of prepositions, though it should be noted that Jackendoff does not generally focus much on this syntactic category. He

did, however, dedicate several pages of his book *Semantics and Cognition* to spatial prepositional phrases, from which the following discussion stems (Jackendoff 1983: 161–170).

In these pages, Jackendoff discusses the relationship between prepositional phrases and PLACES and PATHS; however, I will only consider his analysis of PLACES and prepositional phrases here, as the goal is merely to get a sense of the manifestation of a conceptual semantic approach to prepositional analysis. That being said, let us now examine the basic analysis he provides for one of the spatial senses of English *on* depicted in figure 2.14 below:

$$[_{\text{Place}}\, x] \rightarrow [_{\text{Place}}\ \text{PLACE-FUNCTION}\ ([_{\text{Thing}}\, y])$$

Figure 2.14: Jackendoff's basic conceptual semantic analysis of the spatial sense of English *on* (Jackendoff 1983: 162).

As you can see, it resembles the traditional phrase structure rules of generative grammar. Jackendoff states that he uses a "phrase-structure-like rule for the functional composition of a conceptual structure" (Jackendoff 1983: 162). He does not go into detail at this time about how to interpret this notation, though with a little knowledge of formal logic we can interpret it as: the place of lexical item *x* denotes the place-function (or rather place-relation) of a thing *y*. He provides a concrete example of a prepositional phrase shown in figure 2.15 below:

The mouse is under the table.
$[_{\text{Place}}\ \text{UNDER}\ ([_{\text{Thing}}\ \text{TABLE}])]$

Figure 2.15: Jackendoff's conceptual semantic analysis of the prepositional phrase *under the table* (Jackendoff 1983: 163).

At first glance, this analysis is sparse, though easy to interpret: the place or location of *x* is under the table, where UNDER is the so-called place-function, *x* is the mouse, and *y* is the table. But what does this tell us about the semantics of the spatial sense of *under*? Not much really. It tells us that *under* serves as a place-function and that it requires a THING as its noun phrase complement. While this is indeed useful information, it is not a complete analysis of the semantics of even just one spatial sense of *under* – it merely **tells** us that *under* is a place-function, though it **shows** us very little.

Jackendoff considers other aspects of spatial prepositions, noting:

> [d]ifferent PPs correspond to place-concepts in different ways… The transitive preposition "on"… expresses a place-function, and its strictly subcategorized object NP has the role of expressing the reference object, the argument *y* of the place function… Each place-function imposes conceptual constraints on the nature of the reference object. These appear in the language as selectional restrictions on the corresponding preposition. For instance, the place-function IN requires its reference object to have an upper surface. Another sense of "on" occurs in "the fly on the ceiling," in which the place-function involves the *outer* (i.e. visible) surface of the reference object. These two senses seem to

> be typicality conditions in a preference rule system in the lexical entry for "on" (Jackendoff 1983: 162).

While it is true that different prepositions require different types of noun phrases as their complements, this is not shown by the example in figure 2.15 above, in which the complement noun phrase must be a THING, nor is it shown elsewhere in his example analyses. A couple questions then arise from this: is the information about selectional restrictions required for a sound semantic analysis? If so, how and where should this be made explicit? If not, do labels such as THING, PLACE, EVENT, and STATE suffice? I argue in this study that yes, these selectional restrictions **are** a vital part of semantic analysis and should be conveyed somehow in a complete analysis; however, the aforementioned labels are insufficient (cf. discussion on frame elements as used in FrameNet, section 3.3.1).

Though Jackendoff does not dedicate a significant amount of time or space to the semantics of prepositions, he does give us a glimpse into what a conceptual semantic approach to this word class would look like, thus we have enough information to decide whether or not this approach would be suitable for conducting an in-depth analysis. While the basis of the theory of conceptual semantics (see figure 2.13) is appealing in that it connects both syntax and the relevant processing systems to semantics – which is important, as semantics is not an independent system – it lacks vital semantic detail as shown by the limited analysis of *under* in figure 2.15. This analysis tells us that *under* is a function of PLACE, but it does not distinguish *under* from any other preposition denoting PLACE, such as *on, beside, above*, etc. Geeraerts communicated this same criticism when examining a conceptual semantic analysis of the sentence *John runs from the park to the library*, which is broken down in figure 2.16 below:

$$[_{\text{Event}}\ \text{GO}([_{\text{Thing}}\ \text{JOHN}],\ [_{\text{Path}}\ \text{FROM}([_{\text{Place}}\ \text{PARK}([_{\text{Place}}\ \text{LIBRARY}]])$$

Figure 2.16: Conceptual semantic analysis of *John runs from the park to the library* (Geeraerts 2010: 140).

With regard to this analysis Geeraerts states:

> … clearly, a definition of *run* with a formula like this one does not provide a lot of semantic detail. The description in fact is hardly a definition: typical definitional information about matters like relative speed or manner of motion are not incorporated into the formula. The underspecified nature of the formula also appears from the fact that *run, jog, trot,* or *walk* will have the same representation (Geeraerts 2010: 140).

Jackendoff does address this issue, though very briefly, in his book *Semantic Structures*, stating:

> … how is one to distinguish, say *running* from *jogging* from *loping* or *throwing* from *tossing* from *lobbing*? If the lexical entries for these verbs contain a 3D model representation of the action in question, no distinction at all need be made in conceptual structure. The first set of verbs will all simply be treated in conceptual structure as verbs of locomotion, the second set as verbs of propulsion. Thus again we are relieved of the need for otiose analyses of such fine-scale distinctions… An important boundary

> condition on this analysis is that conceptual structure is the necessary conduit between 3D model information and syntactic information. This means that any semantic distinction that makes a *syntactic* difference must be encoded in conceptual structure… For example, *run, jog,* and *lope* are syntactically parallel, as are *throw, toss,* and *lob*. Thus members of each set can be identical in conceptual structure and differ only in the associated 3D model (Jackendoff 1990: 34).

Basically, Jackendoff says here that the level of conceptual structure does not need to contain all the semantic information required to fully define a lexical item, but rather other, complementary levels or structures can fill in the missing information. My criticism here though is that these other levels or structures are not defined or explored in any detail, so it seems that the missing information is just punted down the road for someone or something else to handle and we are left with only the beginnings of a semantic analysis. It would be advantageous to explore this 3D model in order to complete this theory of conceptual semantics. My next two criticisms are the same criticisms regarding previously discussed approaches, namely, Jackendoff did not use authentic data, thus all the examples analyzed are fabricated (though they are likely utterances). Also, there is very little work conducted on prepositions and the work that does exists here is only on spatial senses of this syntactic category.

2.5 Concluding remarks

In this chapter I have provided the reader with an outline of some well-known and respected, non-cognitive approaches to semantic analysis, including (where applicable) implementations of these approaches to prepositions. The first section of this chapter discussed the historical-philological period of lexical semantics, in which lexicography and mechanisms of meaning change were prominent. I also provided examples of a lexicographic approach to semantics in the entries from the Grimm brothers' *Deutsches Wörterbuch,* and illustrated the reasons why this approach alone is not fitting for a diachronic analysis of the polysemy of prepositions. Following that, I discussed two of the leading approaches in structuralist semantics, namely lexical field theory and componential analysis. The discussion of lexical field theory was complemented by an examination of Rice's study on English *in, on,* and *at* (Rice 1993) and the componential analysis discussion was accompanied by a discussion of Leech's examination of English *in, on,* and *at* (Leech 1969). I discussed the advantages and disadvantages of each of these approaches, ultimately determining that neither approach is suitable for the task at hand. Next, I considered a generative semantics approach and examined Bierwisch's study on locative prepositions in German (Bierwisch 1988), deciding this approach to be equally ill-suited to the current task. Finally, I analyzed two of the prominent contemporary approaches, namely Wierzbicka's Natural Semantic Metalanguage and Jackendoff's Conceptual Semantics. I displayed an NSM approach to the English noun *mice* (Goddard 2011) and an additional NSM approach to the spatial sense of English *on* (Goddard 2013). I noted the benefits and drawbacks to this approach with regard to prepositions and determined this approach would not work for the current undertaking. I also discussed Jackendoff's brief analysis of English spatial prepositions (Jackendoff 1983), determining this approach to be rather incomplete, thus inadequate for this dissertation.

Overall, these works do have advantages to semantic analysis and are invaluable progressions in the field of semantics; however, none of these approaches taken alone seem to be able to accomplish the goals I have for this dissertation, which again are: to capture and illustrate the polysemy of German *mit* in each of the four major periods of the language; to account for the motivation of any meaning changes of *mit*, and; to describe the polysemy networks of *mit* both synchronically and diachronically. Additionally, I use authentic corpus data in my analysis, thus my approach is a usage-based approach in contrast to most of the approaches discussed in this chapter.

In the next chapter, I discuss some of the current cognitive approaches to semantics, including studies conducted on prepositions and ultimately justifying the reasons for choosing a combination of two of these cognitive approaches (one for synchronic analysis, the other for diachronic analysis) for the task undertaken in this dissertation.

CHAPTER 3: REVIEW OF COGNITIVE APPROACHES TO LEXICAL SEMANTICS

After the high point of (largely) non-cognitive approaches to semantics, emerges the cognitive semantic movement, whose proponents viewed semantics not as secondary to syntax, as the structuralists did, but rather as a primary driving force in linguistic analysis. This movement may be regarded as a partial reinterest in the historical-philological approaches of an early era, as there is renewed interest in the connection between the mind and language. On this perspective, Geeraerts states that there exists "a major resemblance between cognitive semantics and historical-philological semantics: both embrace a psychological, encyclopedic conception of linguistic meaning, and both have a primary interest in the flexible dynamism of meaning" (Geeraerts 2010: 203). He does, however, also point out that "At the same time, the diachronic perspective is not as dominant in cognitive semantics as it is in historical-philological semantics: the cognitive mechanisms of meaning extension, like metaphor and metonymy, are now primarily analyzed as synchronic phenomena" (Geeraerts 2010: 203).[25]

The purpose of this chapter is to give the reader an overview of some of the cognitive approaches to lexical analysis and to show the reasons for which I have chosen to use frame semantics and the IITSC as a framework for this project. This chapter includes discussion of three of the most prominent cognitive approaches to lexical semantics, namely semantic categorization and prototype theory (championed by Eleanor Rosch and William Labov), conceptual metaphor and metonymy (George Lakoff and Mark Johnson), and frame semantics (Charles Fillmore). Because my work here is focused on prepositions, supplementing a general discussion of semantic categorization and prototype theory is a discussion of Maria Brenda's work on the polysemy of English spatial *over* (Brenda 2014). To supplement the discussion of frame semantics is an outline of Miriam Petruck and Michael Ellsworth's paper on spatial relations in FrameNet[26] (Petruck & Ellsworth 2018). To my knowledge, there are no published lexical semantic studies on prepositions using solely a theory of conceptual metaphor and metonymy, most likely due to the fact that these concepts play a crucial role in any and all lexical semantic approaches. I do, however, include a discussion of Birgitta Meex's study of the German preposition *über* (Meex 2001) to supplement the section on metaphor and metonymy, as these notions feature significantly in her study.

This chapter also includes a discussion of work conducted on cognitive semantics and meaning change, which focuses on Elizabeth Traugott and Richard Dasher's Invited Inferencing Theory of Semantic Change (Traugott & Dasher 2004). Because, to my knowledge, there is no study on prepositional semantic change using this theory, an overview of Xavier Dekeyser's study of Old and Middle English prepositions follows this discussion. This study is relevant here as it is a historical examination of semantic change of prepositions, including the English counterpart of German *mit*, which is the primary focus of this dissertation.

[25] Though counterexamples to this do exist, such as Sweetser 1990 and Traugott 1986.

[26] The FrameNet project is outlined in section 3.3.7.

3.1 Semantic categorization and prototype theory

Semantic categorization and prototype theory are intimately connected, that is, you cannot fully discuss one without reference to the other. The categorical approach–which led to the emergence of prototype theory–was developed primarily by Eleanor Rosch out of the field of psychology in the early 1970s. She states in her seminal paper *On the internal structure of perceptual and semantic categories* (Rosch 1973) that her work on categorization was influenced by the anthropological principles of classification, referencing Berlin, Breedlove, and Raven's paper *General principles of classification and nomenclature in folk biology* (Berlin, Breedlove & Raven 1973).

Regarding the internal structure of categories, Rosch claims that each category has a core meaning or core meanings which consist of the clearest cases of the category, i.e., the most exemplary members of the category. This notion may be conceptualized as an onion–the core meaning (or most the most exemplary member of the category) represented by the core of the onion, each internal layer of the onion around the core representing members of the category which decrease in similarity to the exemplar the further out you go until you reach the skin of the onion, which represents the most peripheral members of the category.

An example of this type of analysis, which Rosch used in her study, is the category BIRD. In her experiment, she provided participants with a list of types of birds and asked them to categorize them. She then analyzed the reaction times of each of her subjects to conclude which category members were central and which were peripheral. The slower the reaction time, the more peripheral the category member. Subjects were presented with four members of the category BIRD and the results were as expected: The lexical items *robin* and *sparrow* prompted the fastest reaction times to assigning them to the category BIRD, demonstrating that they are considered to be central members of the category, while the lexical items *chicken* and *duck* received slower reaction times, suggesting that they are considered to be peripheral members of the category.

In a subsequent work by Rosch (Rosch 1975), subjects were asked to rate categorical members on a seven-point scale of 'goodness' of fit. They were presented with approximately 50 members of the category BIRD and instructed to rate them on the scale of goodness. The results were also as anticipated in that the highest rated lexical items were *robin*, *sparrow*, *blue jay*, and *bluebird*, among others. Some lexical items that received a middle goodness rating were *hawk, raven,* and *parrot*. The five members which received the lowest goodness rating were *ostrich, titmouse, emu, penguin*, and *bat*. This experiment confirms that the highest rated lexical items are central members of the category BIRD, while the lowest rated are peripheral members.

While Rosch's categorical approach is incomplete from the point of view of semantic change in that it is a synchronic approach restricted to the syntactic category of nouns, it is valuable in that it was the basis for prototype theory, as "… her main concern was to prove that categories are formed around prototypes, which function as cognitive reference points" (Ungerer & Schmid 2011: 18).

In a similar vein, Labov conducted a study around the same time Rosch was carrying out her psychological experiments on categorization. In his paper, *The boundaries of words and their*

meanings (Labov 1973), Labov discusses the categorical view and details a handful of complications with this viewpoint, the most important of which–for our discussion, at least–is the vagueness of category boundaries. He states his motivation for this work as the fact that the description of word meaning had long been left to lexicographers, not linguists. Thus, as we will see later on in this discussion, he, as a linguist, intends to propose new definitions for particular lexical items.

For this study, Labov conducted an experiment in which subjects were presented with a series of pictures (one at a time and in a random order) which he called 'cup-like objects' (see Figure 3.1). The subjects were initially asked just to name the objects– Labov called this the 'neutral' context. Next, they were given the same set of pictures, also randomized, and told to imagine someone holding the object, stirring sugar with a spoon, and drinking coffee or tea from it, then asked to name the object (the 'coffee' context). Then they were presented with the pictures once again and instructed to imagine they were at someone's house for dinner and the object was filled with mashed potatoes or rice and again asked to name the object (the 'food context'). Finally, they were told to imagine the object filled with flowers and again asked to name it (the 'flower' context). While the responses for each of these contexts were all some form of noun phrase, Labov considered only the head noun in each phrase in the first part of his analysis.

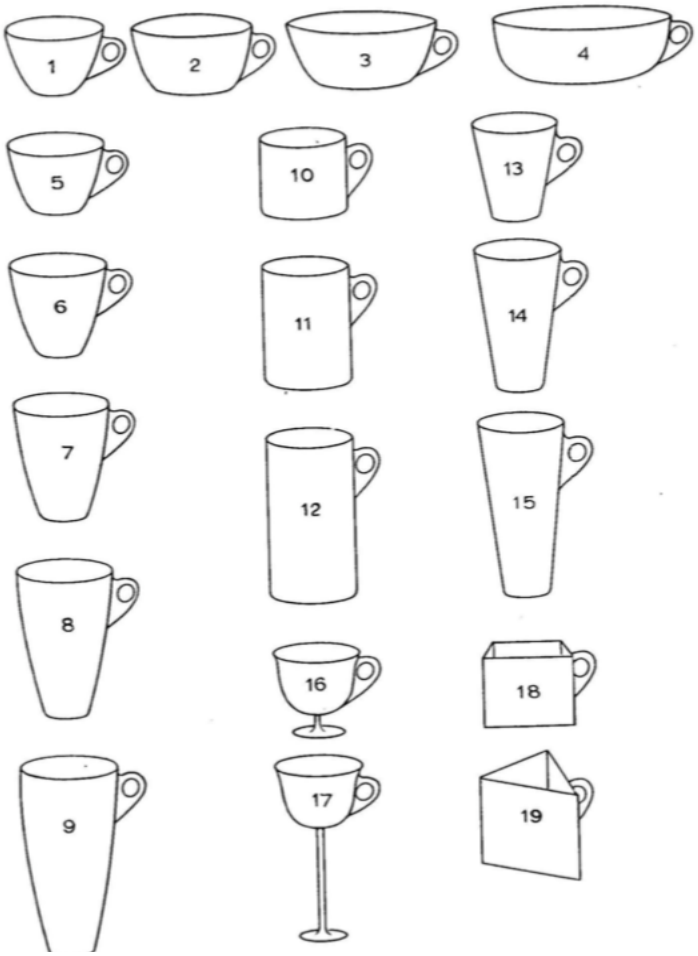

Figure 3.1: Labov's cup-like objects (Labov 1973: 354)

As would be expected, the context greatly influenced categorization. Subjects more often categorized objects as *bowl* if they had imagined it filled with food; whereas they categorized objects more often as *vase* if they had imagined flowers in it.

Considering next the modifiers of the solicited noun phrases, for example 'used for hot liquids' and 'with one handle', Labov created a set of features for each noun. He then redefined, for example, the lexical item *cup* as follows:

> The term cup is regularly used to denote round containers with a ratio of width to depth of $1 \pm r$ where $r \leq r_b$, and $r_b = \alpha_1 + \alpha_2 + \ldots \alpha_v$ and α_i is a positive quantity when the feature i is present and O otherwise.
>
> feature 1 = with one handle
> 2 = made of opaque vitreous material
> 3 = used for consumption of food
> 4 = used for consumption of liquid food
> 5 = used for consumption of hot liquid food
> 6 = with a saucer
> 7 = tapering
> 8 = circular in cross-section
>
> Cup is used variably to denote such containers with ratios of width to depth of $1 \pm r$ where $r_b \leq r \pm r_t$ with a probability of $r_t - r/r_t - r_b$. The quantity $1 \pm r_b$ expresses the distance from the modal value of width to height (Labov 1973: 366).

In order to interpret the new definition of *cup* proposed by Labov, we need first to understand the equations presented in the initial part of the definition. That being said, Labov does not adequately define the equations he presents–they are thus subject to the interpretation of the reader. It is clear that the first part of the definition refers to the measurement of the width to depth ratio of a cup; however, the details are unintelligible without proper explanation. The features listed in the middle of the definition are presumably to be plugged in for *i* in the equation from the first part; thus, if any one of these features is present, α is a positive quantity. What this actually conveys, however, is unclear. The final part of the definition also consists of an opaque mathematical equation which presumably accounts for the fact that there is some variability in the use of the lexical item *cup*; however, the details are once again obscure. This definition would have benefitted greatly from a prose explanation, as too much is left up to the reader for interpretation.

Considering Labov's redefinition of *cup*, we observe advantages and disadvantages to his approach. Advantages of this approach are: the measurements of *cup* are defined and account for variability; and a list of features is defined showing that it is not necessary for *cup* to have all listed features. The disadvantage of this approach is quite clear: the equations are obscure; thus, the definition becomes incomprehensible for the layperson (including many semanticists!).

The key point we can extract from Labov's work here is that categories are not well-defined, but rather have fuzzy (i.e. undefinable) boundaries. He also states, in accordance with my view, that

"[hu]man as a categorizing animal" cannot deal with the facts of linguistic change or variation within linguistic structure (Labov 1973: 343). This supports the argument that the categorical view alone cannot account for semantic change. Additionally, since semantic categorization thus far is a purely synchronic approach, it is not an ideal approach to meaning change. Summarizing the main points of prototype theory, Geeraerts states:

> The theory implies that the range of application of such categories is concentrated round focal points represented by prototypical members of the category. The attributes of these focal members are structurally the most salient properties of the concept in question, and conversely, a particular member of the category occupies a focal position because it exhibits the most salient features (Geeraerts 2010: 185).

While Rosch's and Labov's studies involved experimentation and thus were actually data driven (in contrast to many of the non-cognitive approaches discussed in chapter 2), semantic categorization and prototype theory together are still not completely equipped to handle semantic change or prepositions. Firstly, most of the studies conducted using these approaches have focused on the word class noun. Though there have been studies on abstract nouns, such as *lie* in the sense of prevarication (Coleman & Kay 1981 and Sweetser 1987), the majority of prototype theory studies have been conducted on concrete nouns, such as the two studies discussed above.

Secondly, these studies all take a synchronic approach to semantics, albeit with valid reasoning. There are no speakers left of, for example, Old High German, to conduct psycholinguistic experiments on, thus the methodology would need to be drastically rethought in order to conceptualize a way in which this approach could be applied diachronically using historical corpora.

3.1.1 Maria Brenda 2014: The cognitive perspective on the polysemy of the English spatial preposition *over*

I have chosen to present this work as opposed to some of the more familiar and established studies (such as Brugman 1981, 1988, Tyler & Evans 2003) because this is a more recent inquiry which builds upon these more well-known works. I am focusing only on the final chapter (chapter three) of Brenda 2014 in this discussion as the first two chapters explore cognitive linguistics in general and the syntax of prepositions, respectively. Chapter three, entitled *Semantic and prototypical aspects of the English preposition* over, fits into the discussion of prototype theory outlined above.

In contrast to many prototype approaches, Brenda begins the chapter with a bit of historical background, providing the etymology of the word *over*:

> According to the *Oxford English Dictionary* (*OED* 1989), the form *over* is related to the Old Germanic preposition and adverb *ufa-*, *uf-*, the cognate of the Sanskrit adverb and preposition *upari* and a locative form of the adjective *upara* which was a comparative formation from *upa* meaning 'over, higher, more advanced, later.' The Old Germanic forms *ufa-* and *uf-* were found in forms such as *ufan*, *be-ufan*, and *a-buvan*. In origin,

over was an old comparative of the element *ufa* or *ova* in the form *ab-ove* (Brenda 2014: 140).

Following this introduction, Brenda presents five distinct senses of *over* described in the OED (together with their etymology), including nineteen 'submeanings' and a number of 'peripheral' meanings of each submeaning. Based on this information, Brenda generates an extensive table detailing the evolution of the preposition *over* (again, in contrast to many prototype approaches) which consists of three columns: form, time, and meaning. Under the column labeled 'form', she lists the various spellings of the word; in the column labeled 'time', Brenda presents the documented timeframe for each usage; and under 'meaning', she provides a definition of the word, cross-referenced with the OED entries, plus an example of the usage. I have provided a snapshot of the first part of her table below.[27]

FORM	TIME	MEANING
Ofer, over.	855 – present	**V.17.a.** (time) 'during, all through': Hillary Duff gets married over the weekend.
Ofer, ofor, over.	around 880 – present	**II.5.** (on, upon) on the upper or outer surface of another object, often supported by its surface or resting upon it. Nowadays this usage more frequently assumes the meaning of covering the surface: *Sitting with his hat low down over his eyes.*
Ofer, ouyr, over, ouer, ouerthat.	around 880–1760-62	**III.10.a.** (above in authority, degree, amount) 'in addition to, further than, besides, beyond.' Sometimes *over* was employed in phrases *over this, overthat* where it meant 'moreover': *[He] has plunged you a thousand pounds in debt, over the large sum that we carried with us.*
Ofer, ouer, over, o'er.	around 888 – present	**I.1.a.** (above) one of the objects is or moves 'above, higher up than' the other, used after verbs such as *hang, project, jut, lean,* etc., in relation to anything beneath: *They held a large umbrella over her.*
Ofer, ouer, over.	around 888 – present	**I.1.b.** (above) figurative, 'above, higher than': The possibility of a court case is still hanging over her.

Table 3.1: A portion of Brenda's evolution of English *over* (Brenda 2014: 149)

In addition to the senses listed and described in the OED, Brenda discovered an additional eight senses in the *Urban Dictionary*,[28] a resource which she cites as "an invaluable source of neologisms, colloquial and slang expressions used by young people at the present moment" (Brenda 2014: 152–153).[29]

After presenting the senses of *over* chronologically in this table, on the prototypicality of the word, Brenda states:

[27] For the complete table, see Brenda 2014: 149–152.

[28] *The Urban Dictionary* (https://www.urbandictionary.com/)

[29] It may be worthwhile to note that out of these eight additional senses, only two of them are actually prepositional usages. The remaining six are a mixture of verb particles, discourse markers, and potentially adverbs.

> The earliest sense of the preposition *over* 'during, all through' was first recorded around the year 855 and it is still used in contemporary English. The temporal rather than spatial nature of the sense suggests that a spatial sense of the preposition *over* existed in the language sometime before that date. In fact, a large number of spatial senses, which are probably better candidates for the prototypical sense of *over* than the oldest temporal sense, were recorded only a few years later and have survived until the present day. (Brenda 2014: 152).

This is a logical conclusion given the data and the fact that, as is well established in the literature, temporal senses of words evolve from spatial senses.

By providing historical data and arranging the various meanings of *over* in chronological order, Brenda takes the prototype theory approach one step further, explicitly showing the earliest recorded meanings of the preposition, thus gathering historical evidence to prove which sense of *over* is the prototypical sense. While this is indeed a valid strategy, I would like to note some critical points in the execution of it. First and foremost, all the data gathered here comes directly out of the *OED* and *the Urban Dictionary*. While these are authentic and authoritative sources, these lexicographic works are often compiled from a prescriptivist viewpoint, meaning that they tend to focus on how they (the authors and editors of the works) believe language *should be* used, not how it is actually used by everyday speakers. The data would be more reliable if collected from a corpus or multiple corpora, as corpus data depicts the language as it is actually used. My second criticism thus far is that four out of the forty senses outlined are not accompanied by example usages, two of which come from *the Urban Dictionary.*[30] In order to prove that these are in fact distinct meanings, at least one example is needed.

Following the timeline of the evolution of *over*, Brenda provides her own discussion of each of the senses, based primarily on Tyler & Evans' *The semantics of English prepositions* (Tyler & Evans 2003), which takes a rather Brugman-esque approach in that they use diagrams (schemas) to depict various placement or movement of the Trajector and Landmark. Where necessary, Brenda proposes her own schemas and discussion thereof. She notes that most of her data for this analysis comes from monolingual English dictionaries while the rest of it is gathered from various internet sources, such as newspapers, magazines, and online forums (Brenda 2014: 153). In this section, Brenda also provides, for the sake of comparison, Polish equivalents of some of the English examples.[31] She outlines six senses of *over* plus seventeen extensions stemming from these senses. My intention here is to give the reader a sense of her approach to analysis; therefore, I focus only on what she calls the 'primary' sense (following Tyler & Evans 2003), the 'A-B-C Trajectory Cluster', and the 'Next-to' usage–one of her novel senses.

In accordance with Tyler and Evans (2003) and the OED, Brenda cites the primary (or prototypical) sense of *over* as expressing 'above, higher than' (Brenda 2014: 154).[32] To illustrate

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[30] This is significant because this resource provides meanings that are novel to native English speakers, thus, in some instances, native English speakers, myself included, may not be able to think up an example that fits the definition of the meaning provided.

[31] Though she does not indicate where the Polish examples come from.

[32] Though she mentions in a footnote that Brugman's primary sense differs slightly in that hers involves the categories *above* and *across* (Brenda 2014: 154).

the primary sense of *over*, Brenda uses the schema from Tyler and Evans (2003) shown in Figure 3.2 below:

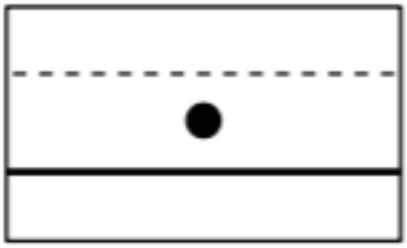

Figure 3.2: Primary sense of *over* (Tyler & Evans 2003: 66, in Brenda 2014: 155)

She explains the schema, stating that the dark sphere represents the Trajector, the thick horizontal line the Landmark, and the dashed line establishes the boundary of the sphere of influence. To illustrate this usage of *over*, Brenda provides two English examples: *The lamp hung over the table* and *They held a large umbrella over her* (Brenda 2014: 154). She explains that the Trajectors in these sentences are *the lamp* and *a large umbrella*, and the Landmarks are *the table* and *her*, respectively. She then includes the Polish equivalent of these two sentences,[33] noting that the Polish preposition *nad* is equivalent to English *over* in this sense. Though the Polish examples seem to be present for mere comparison, it would be beneficial to the reader if Brenda had parsed them so that we, as readers, could better understand how exactly the senses of *over* are rendered in Polish. As it stands, if the reader does not possess any proficiency in the Polish language, they must trust her claims about these examples.

Moving on to the A-B-C Trajectory Cluster, according to Brenda:

> The frequency of the occurrence of the spatial relation between the TR [Trajector] and the LM [Landmark] represented in Figure 3–1 [Figure 3.3, here] may lead to the reanalysis of the relation and foregrounding of its particular aspects… The reanalysis of the TR/LM configuration in Figure 3–1 [Figure 3.3] encoded by the primary sense of the preposition *over* results in the schematization characteristic of the A-B-C Trajectory Cluster (Brenda 2014: 157).

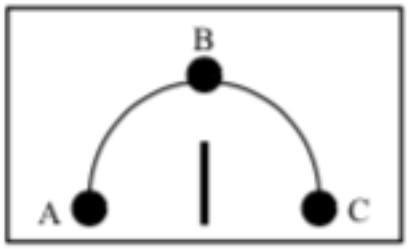

Figure 3.3: A-B-C Trajectory Cluster (Tyler and Evans 2003: 71, in Brenda 2014: 157)

To illustrate this sense of *over*, Brenda provides the following sentences: *The boy jumped over the fence*; *The dog ran over the puddle*; *The woman stepped over the bucket* (Brenda 2014: 157). She then explains the schema with reference to the first sentence above, stating:

[33] Again, she does not disclose where the Polish equivalents come from.

> The large bodies of encyclopaedic knowledge that language users have about the world, specifically knowledge about the gravitational forces, jumping and the nature of fences, are activated to envisage the spatial scene involving the A-B-C trajectory. In order to jump over an obstacle, people push off the ground and fight against the gravitational force in point A of the trajectory, travel over the obstacle and are located higher than the obstacle in point B and land on the other side of the obstacle in point C… The contribution of the preposition *over* into the interpretation is limited to the encoding of the spatial relation holding between the TR and the LM. The arrangement seems to involve the TR located higher than the LM, that is, in point B of the trajectory (Brenda 2014: 157–158).

Brenda is describing here a path that is signaled by this usage of the preposition *over* to be traversed. The Trajector must travel along the path, starting at point A, pass through point B, and end up at point C. She then briefly discusses Polish paraphrases of *The dog ran over the puddle* and *The woman stepped over the bucket* in which the equivalents of English *over* differ and are represented as *przez* and *nad*, the former of which, according to Brenda, expresses the notion of 'to the other side of' and corresponds to English *across* (Brenda 2014: 160), thus requires a different schematization, shown in Figure 3.4 below:

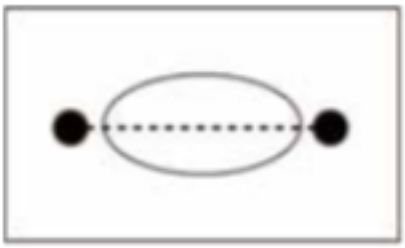

Figure 3.4: Schematization of Polish *przez* (Brenda 2014: 160)

She explains the difference between the A-B-C trajector sense of English *over* and the Polish paraphrase *przez* stating that the latter "encodes the whole path that the TR has to travel in order to reach the other side of the LM and not the highest point of the path leading from point A, over an obstacle, to point C" (Brenda 2014: 160).

Following the A-B-C trajectory sense, Brenda discusses very briefly a novel usage from the *Urban Dictionary*, which she calls the 'Next-to' usage.[34] She claims this sense may be viewed as an extension of a sense that she calls the 'On-the-other-side-of sense'–which extends from the A-B-C trajectory sense–or it may be perceived as simply an extension of the primary sense of the word. The on-the-other-side-of sense can be briefly summed up as an extension of the A-B-C trajectory sense in which point C of the path is profiled.[35] Her discussion here is based on one sole example and that is the prefix *over* in the word *overbay*. She states:

> The prefix *over* in the compound *overbay* expresses the meaning 'to live over water or the bay' and it may be considered an extension of the On-the-other-side-of Sense… This

[34] Brenda distinguishes between 'sense' and 'usage', stating that a sense is well established but a usage is not (Brenda 2014: 161, footnote 10).

[35] See Brenda 2014: 162–165 for more in depth discussion of the on-the-other-side-of sense.

> sense of the word *over* highlights the "this" side of the LM… Alternatively, the sense can be treated as an extension of the Primary Sense of *over* expressing a 'higher than and next to' relation between the TR and the LM. The spatial arrangement inherent in this usage of *over* involves a person living on a hill next to a bay. At the same time, it must be noted that, as the usage was cited in the *Urban Dictionary*, it is probably used by a small number of people living in the neighborhood of water (Brenda 2014: 161).

She then provides a schematization of this sense of *over* as seen in Figure 3.5 below, explaining that the Trajector is represented by the shaded sphere, the Landmark by a thick horizontal line, and clarifying that the Trajector must be situated both higher than and next to the Landmark (Brenda 2014: 161).

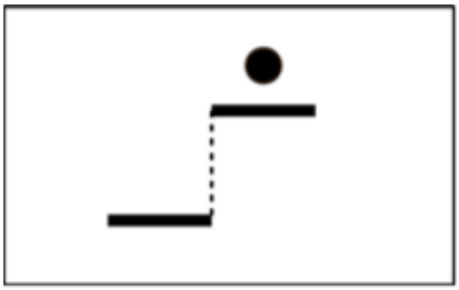

Figure 3.5: Brenda's schematization of the 'next-to' usage of *over* (Brenda 2014: 162)

Brenda then cites the *Urban Dictionary*, which claims that this usage has two metaphorical extensions, namely "people with extremely great talent in nearly all areas of life" and "amazing" (Brenda 2014: 162). She goes on to speculate (that is, she concludes based solely on the meanings given by the *Urban Dictionary* and one example usage) that:

> Language users correlated the fact that someone lives over water or a bay with the fact that they are generally wealthy and successful in life, which was further extended to signify something amazing. Again, these metaphorical meanings may have arisen in a specific community where a group of successful people called *overbays* lived next to a bay. *Overbay* in the following conversation probably conveys the meaning 'people with extremely great talent in nearly all areas of life' rather than 'amazing':
>
> > *… [D]id you see that kid[?] / - [Y]eah they have to be an Overbay[.]* (Brenda 2014: 162).

While I agree that it is logical to assume that this usage probably arose in one specific community near a body of water, the rest of her argument is mere speculation. We cannot make any assumptions about the economical position of an *overbay*, nor can we extrapolate anything about the talent of "that kid" based solely on this one, semantically sparse example. Thus, due to lack of data, we cannot claim metaphoric extension here.

Following her discussion of each sense of *over*, Brenda continues the chapter in various directions that differ from the prototype approach. While she does propose valuable arguments and viewpoints, including the geometric properties of the trajector and landmark and functional relations in the rest of the chapter (i.e., relationships that hold between the trajector and

landmark), they do not pertain to prototype theory; therefore, I do not discuss them here. Brenda does, however, state in her conclusion that, based on her analysis of both the grammatical functions (from a previous chapter) and semantic content, "it [*over*] should not be treated as an empty word as is common in traditional approaches to language (e.g. Lyons 1995)" (Brenda 2014: 239)–a statement that aligns with the view taken in this dissertation.[36]

The section of Brenda's work discussed above shows briefly a way in which the prototype approach may be applied to a preposition. She gathers data (albeit from problematic sources), categorizes each example of the word, establishes a 'primary' (i.e., prototypical) sense of the word, and describes further senses and usages of the word based on their relation to this primary sense. It seems to be implied by the fact that Brenda supplements her analysis of the senses of *over* by devoting a considerable number of pages to the geometric relations and the functional consequences of that relation that Brenda does not believe that a prototype analysis on its own is sufficient. As further evidence of this, she states in her conclusion:

> Spatial prepositions should be analyzed not only in terms of geometric relations holding between the TR and the LM, but also in terms of the functional consequences such a relation has for them (Coventry and Garrod 2004). In other words, geometric schemas are frequently associated with nongeometric ones. The present analysis shows that the preposition *over* instantiates two nongeometric categories defined by Talmy (2005)… Although the cognitive and affective states constitute the semantic components of nonspatial senses of *over*, the preposition can also encode a range of functional elements complementing spatial configuration of the involved objects. These functional elements pertain to individual conceptualizations and result from the geometric properties of the spatial scenes encoded, as well as our knowledge about the objects involved and the surrounding reality (Brenda 2014: 244).

I am in agreement with Brenda in that a prototype approach on its own is insufficient in describing or defining the semantics of a preposition, though her approach seems a bit too convoluted in that it entails multiple lengthy tables which must be compared in order to understand the meaning of each sense of a lexical item. I believe an approach to semantic analysis should result in entries that can be easily comprehended with minimal background information. A frame semantic (cf. section 3.3) approach is both detailed and a more straightforward approach in describing the semantics of prepositions.

3.2 Conceptual metaphor and metonymy

While traditionally the notion of metaphor has been discussed in terms of literature, this concept can be extended to language use in general. Any time language users reference one thing in terms of another, they are employing metaphor (or metonymy). For example, the utterance *prices rose*, while a seemingly straightforward statement, actually employs the conceptual metaphor MORE IS UP. When we as language users reference anything from an abstract domain, such as prices or emotions for example, in terms of a concrete domain, such as the placement on

[36] It should be noted here that Brenda's conclusion here is not necessarily new, but rather confirms the arguments of previous scholars views on prepositions (such as Lakoff 1987 and Brugman 1988, among others).

a scale, it is an example of metaphor. George Lakoff and Mark Johnson conceived of and developed what we call conceptual metaphor, their seminal work being *Metaphors we live by* (Lakoff & Johnson 1980). The book begins as follows:

> Metaphor is for most people a device of the poetic imagination and the rhetorical flourish–a matter of extraordinary rather than ordinary language. Moreover, metaphor is typically viewed as characteristic of language alone, a matter of words rather than thought or action. For this reason, most people think they can get along perfectly well without metaphor. We have found, on the contrary, that metaphor is pervasive in everyday life, not just in language but in thought and action. Our ordinary conceptual system, in terms of which we both think and act is fundamentally metaphorical in nature (Lakoff & Johnson 1980: 3).

They then delve into a brief but detailed discussion of how users of English talk about the concept ARGUMENT, using the following examples (Lakoff & Johnson 1980: 4):

> Your claims are *indefensible*.
> He *attacked every weak point* in my argument.
> I *demolished* his argument.
> I've never *won* an argument with him.
> You disagree? Okay, *shoot*!
> He *shot down* all of my arguments.[37]

Examining all the italicized lexical units above (i.e. *indefensible, attack, weak point, demolish, win, shoot, shoot down*), it is clear that these are all terms which are used to speak of physical combat or, as Lakoff and Johnson deem it, war. We can then state that language users conceptualize the abstract notion of ARGUMENT in terms of the concrete event of WAR, thus language users employ the conceptual metaphor ARGUMENT IS WAR to talk about arguments.

Geeraerts sums up the three essential propositions of Lakoff and Johnson's conceptual metaphor theory as such: First, metaphor is a cognitive phenomenon, rather than a purely lexical one (Geeraerts 2010: 204); Second, metaphor should be analyzed as a mapping between two domains, a source and a target (Geeraerts 2010: 206); Third, linguistic semantics is experientially grounded (Geeraerts 2010: 207).

With regard to the first tenet, Geeraerts makes a crucial point, stating "The sets of expressions that illustrate metaphoric patterns are open-ended; they do not only comprise conventionalized expressions, but may also attract new ones" (Geeraerts 2010: 205). This is important, as not only conventionalized expressions, such as the ones listed below, but also novel expressions may be understood. Geeraerts provides a partial list of Lakoff & Johnson's examples of the metaphor THEORIES AND ARGUMENTS ARE BUILDINGS, including the following (Geeraerts 2010: 205):

[37] I did not include all the examples they listed. For the complete list see (Lakoff & Johnson: 4).

> Is that the *foundation* for your theory?
> The theory needs more *support*.
> The argument is *shaky*.
> We need some more facts or the argument will *fall apart*.
> We need to *construct* a strong argument for that.

In addition to these examples of typical statements, one can expand upon the metaphor THEORIES AND ARGUMENTS ARE BUILDINGS in novel and creative ways, and will still be able to be understood. Geeraerts points out that an utterance such as *Complex theories usually have problems with the plumbing* is still easily understood, as we conceptualize theories in terms of buildings (Geeraerts 2010: 205), because we have stored the metaphor THEORIES AND ARGUMENTS ARE BUILDINGS in our mind, thus this is not a purely lexical phenomenon.

Regarding the second tenet (i.e. that metaphor is analyzed as a mapping between two domains), employment of conceptual metaphor is conceived of as referencing a 'target' in terms of a 'source'. This means that when language users are discussing an abstract concept, such as ARGUMENT, ARGUMENT is the target domain–the concept under discussion. Because language users talk about the target in terms of something concrete, that something else is said to be the source domain. So, essentially, language users are said to 'map' a target domain onto a source domain. Geeraerts provides a (non-exhaustive) list of source and target concepts relating to the metaphor LOVE IS A JOURNEY[38] (Geeraerts 2010: 206):

SOURCE	TARGET
the travellers	the lovers
the means of transport	the relationship itself
the journey	the evolution of the relationship
the obstacles encountered	the difficulties experienced
decisions about which way to go	choices about what to do
the destination of the journey	the goals of the relationship

He also points out that there can be objects or concepts in one domain that may not map to the other, using the example of booking a reservation for a journey which is not readily applicable to the domain LOVE (Geeraerts 2010: 206).

As to the third tenet of conceptual metaphor (i.e. that linguistic semantics is experientially grounded) Geeraerts cites Lakoff and Johnson, who claim: "Not only do we understand one concept in terms of another, but we commonly also structure less concrete and vaguer concepts in terms of more concrete and more sharply delineated ones" (Geeraerts 2010: 207, citing Lakoff & Johnson 1980: 112). He uses the concept of containment as an example to illustrate this statement, writing:

> Containment, for instance, is an image schema related to our frequent experience of inserting objects into and removing them from bounded areas. Metaphoric uses of the

[38] Geeraerts adapted this list from Kövecses 2002: 7.

> containment image schema occur when someone *enters into a depression*, to take an example: the abstract emotional condition is seen as a container restricting the person's behavior… Image schemas in this sense are pre-conceptual in that they are assumed to develop before conceptual thinking (Geeraerts 2010: 207–208).[39]

This illustrates that language reflects tangible, real-life experiences, thus it is experientially grounded.

As far as I am aware, research and work on Conceptual Metaphor Theory has been restricted to synchronic data thus far and I believe that this theory would benefit greatly from a diachronic viewpoint. In accordance with this sentiment, Geeraerts writes:

> Conceptual Metaphor Theory tends to discern metaphors by comparing figurative readings with the basic meaning of a word, but if we take into account the radial network structure of linguistic concepts, any existing reading in the network could be the starting point for a new metaphor. In its simplest form, this observation implies that Conceptual Metaphor Theory should take into account the existence of dead metaphors, i.e. expressions that may be metaphoric from a diachronic point of view, but that have lost their metaphoric motivation for the average contemporary language user (Geeraerts 2010: 209).

He notes upon concluding this discussion, however, that "from a diachronic perspective, establishing the source of a metaphor requires meticulous historical research" (Geeraerts 2010: 210). Examples of conceptual metaphor are present in the data presented and analyzed in this dissertation in chapter 5.

Conceptual metaphor is so closely related to another mechanism of language, metonymy, that one should not discuss it without considering metonymy. Rather than conceptualizing one thing (the target) in terms of another (the source), the use of metonymy in language shows that language users also conceptualize some things in terms of the relationship they hold to something else. In the literature, the classic example of metonymy is a server in a restaurant bringing food from the kitchen to a customer asking, "are you the ham sandwich?" Removed from the restaurant context, this question is rather absurd, but if one imagines it posed in the context of a dining establishment, it becomes a completely reasonable question. The server is not actually inquiring whether the customer is two slices of bread with ham and presumably condiments in between, but rather whether they are the person who **ordered** the ham sandwich–thus the lunch order is being used to reference the person who ordered it. In the restaurant context, you could imagine this scenario playing out in a number of ways–a cashier asking the same question while ringing up a customer, a server conversing with a coworker, telling them about something this person who ordered a ham sandwich told her, saying for example "the ham sandwich over there said it's supposed to rain all day" or "the ham sandwich needs a refill". Again, in each of these scenarios *ham sandwich* (i.e. the item ordered) is referring to the person who ordered the ham sandwich, thus they are all examples of metonymy.

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[39] Some additional core image schemas are SOURCE PATH GOAL, LINK, PART WHOLE, CENTER–PERIPHERY, BALANCE, UP–DOWN, FRONT–BACK (Geeraerts 2010: 208).

Lakoff and Johnson provide a rather extensive record of common patterns of metonymy used in everyday language (Lakoff & Johnson 1980: 38–39). Below is a partial list of their data:

THE PART FOR THE WHOLE
Get *your butt* over here!
We don't hire *longhairs*.
The Giants need a *stronger arm* in right field.

PRODUCER FOR PRODUCT
I'll have a *Löwenbräu*.
He's got a *Picasso* in his den.
I hate to read *Heidegger*.

OBJECT USED FOR USER
The *sax* has the flu today.
The *BLT* is a lousy tipper.
We need a better *glove* at third base.
The *buses* are on strike.

CONTROLLER FOR CONTROLLED
Nixon bombed Hanoi.
Napoleon lost at Waterloo.
A Mercedes rear-ended *me*.

INSTITUTION FOR PEOPLE RESPONSIBLE
Exxon has raised its prices again.
You'll never get the *university* to agree to that.
The *Army* wants to reinstitute the draft.
I don't approve of the *government's* actions.

THE PLACE FOR THE INSTITUTION
The *White House* isn't saying anything.
Washington is insensitive to the needs of people.
Paris is introducing longer skirts this weekend.
Hollywood isn't what it used to be.

THE PLACE FOR THE EVENT
Remember *the Alamo*.
Pearl Harbor still has an effect on our foreign policy.
Watergate changed our politics.
It's been *Grand Central Station* here all day.

Geeraerts succinctly summarizes the most important points of metonymy presented by Lakoff and Johnson as follows:

> Lakoff and Johnson emphasize the fact that metonymic concepts… are conceptual and not purely linguistic, in much the same way that metaphoric concepts are. In the first place, metonymic concepts allow us to think of one thing in terms of its relation to something else. In that sense, we can distinguish a source and target in the description of metonymy just as we can for metaphors. In the second place, metonymies are systematic in the sense that they form patterns that apply to more than just an individual lexical item. In third place, metonymic concepts structure not just the language, but also the language users' thoughts, attitudes, and actions. Saying that Nixon bombed Hanoi is not just a way of referring to the air force by means of its chief commander, but it is also a way to think of Nixon as ordering the bombing and of holding him responsible for it, even though he may not have dropped the bombs himself. In the fourth place, metonymic concepts are grounded in experience. If you have no idea of the historical events that happened at Pearl Harbor and the effect they had on the involvement of the United States in World War II, the sentence *Pearl Harbor still has an effect on our foreign policy* will not make a lot of sense to you (Geeraerts 2010: 214).

Considering then the example of the ham sandwich, we can analyze it as follows: The sandwich is the source, as it is the term being used in reference to something else, and the person who ordered the sandwich is the target, as this person is the thing being referred to. This is an example of one of the common patterns of metonymy, namely OBJECT USED FOR USER, as the ham sandwich is used for the person who uses (i.e. eats) it. Considering this example, you probably imagined a server who was not particularly engaged with the customer, and perhaps considered that person as just a part of their job (maybe even as just a tip), not actually as a complex human being with interests, feelings, etc. If the server had said instead, for example, *the woman who ordered the ham sandwich*, though this is not an example of metonymy, we might suppose that the server thought of her as more than just a task or a tip. As to the fourth point that Geeraerts outlined above, if you were not in a restaurant and you heard this utterance, you would have a very hard time comprehending the meaning of this utterance.[40]

3.2.1 Birgitta Meex 2001: The spatial and non-spatial senses of the German preposition *über*

I would like to proceed now to a discussion of Birgitta Meex's study on the spatial and non-spatial senses of German *über* (Meex 2001). Though the aim of her study was not explicitly to advance Conceptual Metaphor Theory, nor did it use this theory exclusively, I chose to discuss it here because it includes well-founded examples of the application of the theory. Meex's goal in this study was "to show how the multiple readings of *über* constitute a continuum, ranging from the spatial relations via the temporal relations to a variety of abstract relations" (Meex 2001: 2). In order to corroborate this, Meex examines and analyzes data from authentic texts, including newspapers, magazines, and contemporary literature.[41]

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[40] Updated cognitive viewpoints on metaphor, frame metonymy, and category metonymy have been published and are worth noting here (see Dancygier & Sweetser 2014).

[41] The newspaper and magazine sources are all from the 1990s and the literature ranges from the 1950s to the 1990s.

Meex begins her analysis by detailing first the spatial senses of German *über*. She notes that the spatial sense is polysemous, but that "its multiple usages cluster mainly around three *relational image schemas*: PATH, COVERING, and VERTICALITY" (Meex 2001: 2). Similarly to Brugman (1981, 1988), Tyler and Evans (2003), and Brenda (2014), Meex uses schemas to represent spatial senses of *über*, most of which are more detailed than the schemas proposed by the previously named authors. I am not including an in-depth discussion of Meex's analysis of these senses, as it is the abstract senses and the ways in which they emerge out of the concrete senses that I am primarily concerned with in this dissertation. It is noteworthy, however, as metaphor and metonymy are so intimately related, that Meex points out that the COVERING senses of German *über* are metonymically related to the PATH senses. With regard to this, she states "Rather than profiling a path that extends from an unprofiled source to a [sic] unprofiled goal via the landmark, the COVERING schema profiles that part of the *über*-path that coincides with the landmark" (Meex 2001: 6). She does not, however, offer an explanation as to the way in which the COVERING sense is metonymically related to the PATH sense.

After analyzing three distinct spatial schemas along with a number of sub-senses, Meex discusses the temporal senses of German *über*, in which Lakoff and Johnson's conceptual metaphor TIME IS A PATH plays a fundamental role. It has been well-established in the literature that many languages use spatial terms to talk about time, thus, following Lakoff and Johnson's theory, we can say that humans conceptualize time in terms of space. Meex explains the connection between spatial and temporal senses of German *über* as follows:

> In its spatial, path usages… *über* denotes that a trajector takes up a series of consecutive locations in space (i.e., a path) with respect to a landmark. Similarly, temporal *über* may assign a trajector to a series of consecutive points on the time line; it can thus be said to designate a durative relation. In particular, *über* may lexicalize a temporal relation in which the event/situation in the trajector extends over a temporal trajectory that is coincident with the time span in the landmark… (Meex 2001: 11).

To illustrate the last point, Meex uses the following examples (Meex 2001: 11):

(1) *ein sich über drei Jahre hinziehender Krieg*
a war dragging on for three years

(2) *über Mittag geöffnet*
open over lunchtime[42]

Meex continues this discussion using examples of temporal senses of *über* that correspond to the spatial senses analyzed in the beginning of her article. In order to illustrate the use of the TIME IS A PATH metaphor, let us consider one example Meex provides. Meex, like Brugman (1981, 1988), employs schemas to make the uses of each of the senses of *über* explicit. She does not, however, dedicate much prose to the explanation of the use of the metaphor employed here, so I have added a bit of explanation to her schemas in order to make more explicit the way in which the TIME IS A PATH metaphor works with regard to *über*.

[42] I have edited Meex's English translations where I deemed necessary. Her translation here "open at lunchtime" seemed ambiguous to me, as that translation could imply that the establishment opens up at lunchtime, whereas the original German does not imply that.

The first example of Meex's that I am focusing on is the temporal sense of *über* which "denotes that a trajector describes, or extends over, a (goal-oriented) temporal path from a source (marked by *vom*), via the landmark (which may be construed as a point in time), to a destination…" (Meex 2001: 13). Compare the examples provided by Meex below:

(3) *Von Ahnatal über Korschenbroich bis Stuttgart*[43]
From Ahnatal via Korschenbroich to Stuttgart

(4) *Vom Winteraustreiben über die Fastenzeit bis zu Palmsonntag, Ostern und Pfingsten*[44]
From the end of winter through Lent to Palm Sunday, Easter, and Pentecost[45]

Example (3) is an illustration of one of the PATH schemas Meex discusses in her analysis of the spatial senses of *über*. Meex explains, "*über* specifies the passage or route, i.e., the one-dimensional path that the trajector follows on its way from some unprofiled source to some unprofiled goal" (Meex 2001: 6). Let us now compare the two examples. Syntactically, they are almost identical: *von X über Y (bis) zu Z*; however, the semantics of the two utterances are different. Example (3) is clearly describing physical travel from one place (a Source) to another place (a Goal) via a third place (a Path). Example (4), however, cannot be describing physical travel as none of the substantives are actual places, but rather periods of time. This is a clear example of the employment of the TIME IS A PATH metaphor, as the we can map each substantive (i.e. time period) from example (4) onto one from example (3). The semantics of (4) are as follows: time is moving forward from the time period indicated by the *Winteraustreiben* (the Source) through the time period indicated by *Fastenzeit* (the Path) to the time periods indicated by *Palmsonntag, Ostern,* and *Pfingsten* (the Goals). Meex illustrates both of these usages of *über* using the following figure:

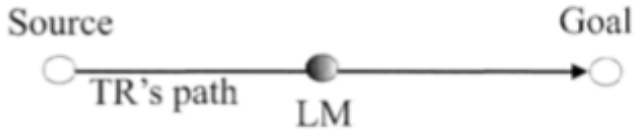


Figure 3.6: Meex's depiction of the Landmark (LM) of *über* as a point on both a physical path and a temporal path (Meex 2001: 6, 13)

Proceeding to the abstract senses of *über*, we see a plethora of other metaphors employed. Meex states:

> Just like temporal relations, complex abstract relations such as cause and reason, purpose, means and instrument, circumstance, etc. are structured metaphorically, i.e., they are understood on the basis of spatial concepts. Furthermore, the abstract senses of *über* are

[43] (Meex 2001: 6)
[44] (Meex 2001: 13)
[45] Meex's translation: "From the end (lit. exorcizing) of winter through Lent till Palm Sunday, Easter and Whitsun (Meex 2001: 13).

> motivated by the image schemas invoked by spatial *über* on the one hand and the metaphors governing the German conceptual system on the other hand (Meex 2001: 15).

In this section, Meex illustrates the ways in which a number of metaphors are employed to reference abstract domains. To remain consistent with the examples I discussed above, I am focusing on just one schema that Meex analyzes, namely PATH, to show how this can be metaphorically extended in a number of ways.
One of the abstract usages of *über* which Meex examines is the expression of the concepts of 'means' or 'instrument' employing the SOURCE-PATH-GOAL schema. She notes that "this metaphoric mapping ties in with Lakoff's (1990, 1994) analysis of the notion of 'means': MEANS ARE PATHS TO DESTINATIONS; MEANS OF CHANGE IS PATH OVER WHICH MOTION OCCURS; PURPOSES ARE DESTINATIONS" (Meex 2001: 20). She provides the following examples:

> (5) *Beängstigende Sinneseindrücke erreichen über die Sinnesorgane das Gehirn.*
> Frightening sense impressions reach the brain via sensory organs.[46]
>
> (6) *Polens verspätete Rückkehr nach Europa führt über den wirtschaftlichen Weg.*
> Poland's late return to Europe leads along economic paths.
>
> (7) *Das Programm werde in Nordrhein-Westfalen über Kabel ausgestrahlt.*
> The program is transmitted in North Rhine-Westphalia via cable.[47]

With regard to example (7), Meex appeals to the well-known CONDUIT metaphor, stating:

> According to Reddy's CONDUIT metaphor (Reddy 1993), communication transfers thoughts and feelings along a conduit. More specifically, linguistic interaction uses means of communication that are conceptualized as one-dimensional means of transport. And indeed, very often pathlike, i.e., extended, objects such as telephone lines and cables are involved (Meex 2001: 21).

Here it is fitting to conclude the presentation of this work here to draw attention to one small critical matter, keeping in mind, however, that Meex's aim in this study was not specifically to show a metaphoric analysis of *über*, but rather again "to show how the multiple readings of *über* constitute a continuum, ranging from the spatial relations via the temporal relations to a variety of abstract relations" (Meex 2001: 2). She does use metaphor and image schema to relate each of these senses, thus her study would benefit from more in-depth analysis of *how* exactly these senses are related metaphorically, rather than just stating that they are related via metaphor. That is, it would be beneficial for the reader if the author had explicitly stated the sources and targets in each of the examples, thus illustrating the way in which each metaphor pertains to each example provided.

As the reader will see in the following chapters, I also appeal to Conceptual Metaphor Theory in order to connect some senses of the lexical item examined in this dissertation; however, I include

[46] Meex's translation: "Frightening sense impressions reach the brain through the sensory organs" (Meex 2001: 21).
[47] Meex's translation: "The program is transmitted in North Thine-Westphalia by cable" (Meex 2001: 21).

detailed discussions and analyses, showing exactly how I have deemed these usages metaphoric by providing the source and target of each sense in question.

Despite the criticism above, this study is beneficial to the field of cognitive lexical semantics in that it is the first systematic study of non-spatial usages of a German preposition (according to Meex (2001: 1) and as far as I am aware) and outlines most, if not all, the non-spatial usages of the German preposition *über*.

3.3 Frame Semantics

This next section does not just provide a basic overview of the frame semantic approach as in the previous sections, but rather an extensive presentation of the approach, including its inception, evolution, and current state, because I am using frame semantics as the foundation of my analysis. I begin this discussion with Charles Fillmore's first publication on the subject, titled *The case for case,* over a half a century ago when he was referring to what we now call frame semantics as 'case frames' (Fillmore 1968). However, before discussing the origins of frame semantics, I would like to provide the reader with a basic sense of where the approach is today. Below is a brief statement summarizing the fundamentals of frame semantics:

> … a word's meaning can be understood only with reference to a structured background of experience, beliefs, or practices, constituting a kind of conceptual prerequisite for understanding the meaning. Speakers can be said to know the meaning of the word only by first understanding the background frames that motivate the concept the word encodes. Within such an approach, words and word senses are not related to each other directly, word to word, but only by way of the links to common background frames and indications of the manner in which their meanings highlight particular elements of such frames (Fillmore & Atkins 1992: 76–77).

The concept of 'frame' has evolved over the years together with the evolution of the approach itself. I have selected a small handful of publications to present here which illustrate this evolution. As noted in the opening of this section, I am beginning with a discussion of Fillmore's first publication on the subject (Fillmore 1968). This is followed by the evolution of the approach as represented by Fillmore 1970, 1975, 1976, 1982, Fillmore and Atkins 1992, and concludes with a presentation of the FrameNet project–the computational manifestation of frame semantics. Additionally, a presentation of Petruck & Ellsworth's article on spatial relations in FrameNet is provided as an example of the way in which the frame semantic approach may be applied to prepositions.

3.3.1 Fillmore 1968: The case for case

In his first publication exploring the idea that would become known as frame semantics, Fillmore begins with an outline of the then current state of research on grammatical case from the viewpoint of a syntactician–more specifically, a generative syntactician. He defines the term 'case,' as he applies it, as "the underlying syntactic-semantic relationship" and 'case form' as

"the expression of a case relationship in a particular language–whether through affixation, suppletion, use of clitic particles, or constraints on word order" (Fillmore 1968: 42). He then defines basic sentence structure in true generative grammarian fashion as:

> Sentence (S) → Modality (M) + Proposition (P) (Fillmore 1968: 45).

For our discussion here, Sentence (S) and Modality (M) are not relevant, thus will not be examined. It is Proposition (P) that we are interested in. Fillmore defines P as "a tenseless set of relationships involving verbs and nouns (and embedded sentences, if there are any)" (Fillmore 1968: 44), or…

$$P \rightarrow V + C_1 + \ldots + C_n.$$

The claim made by this definition of P is that a Proposition (P) consists of a Verb (V) plus one or more 'case categories' (C_x). Fillmore also claims that no case category may appear more than once (Fillmore 1968: 45). To further explicate the meaning of 'case', he states:

> The case notions comprise a set of universal, presumable innate, concepts which identify certain types of judgments human beings are capable of making about the events that are going on around them, judgments about such matters as who did it, who it happened to, and what got changed (Fillmore 1968: 45–46).

He then provides a list of the cases that are included in the analysis, noting that the list will certainly need to be expanded upon (Fillmore 1968: 46):

> *Agentive* (A): the case of the typically animate perceived instigator of the action identified by the verb.
>
> *Instrumental* (I): the case of the inanimate force or object causally involved in the action or state identified by the verb.
>
> *Dative* (D): the case of the animate being affected by the state or action identified by the verb.
>
> *Factitive* (F): the case of the object or being resulting from the action or state identified by the verb, or understood as a part of the meaning of the verb.
>
> *Locative* (L): the case which identifies the location or spatial orientation of the state or action identified by the verb.
>
> *Objective* (O): the semantically most neutral case, the case of anything representable by a noun whose role in the action or state identified by the verb is identified by the semantic interpretation of the verb itself; conceivably the concept should be limited to things which are affected by the action or state identified by the verb. The term is not to be confused with the notion of direct object, nor with the name of the surface case synonymous with accusative.

Taking into account the list above, some example Ps are: V + A, V + O + A, V + D, V + O + I + A (Fillmore 1968: 45).

Another term Fillmore generates in this paper is 'case frame' which he defines as "the case environments the sentence provides" (Fillmore 1968: 48) and claims that there are two problems of lexical selection: one regarding nouns and the other regarding verbs. With regard to nouns, Fillmore states:

> Those features of nouns required by a particular case are to be specified by obligatory rules of the type such as the following, which specifies that any N in an A or D phrase must contain the feature [+animate]…
>
> $N \rightarrow [+animate]/^{A,D} [X____Y]$
>
> To take care quite generally of lexical features associated with specific cases, we may appeal to a rule which associates with each noun a label identifying the case relation it holds with the rest of the sentence. Such a rule might associate with every noun under L the feature [+locative], for example. Since abstract nouns such as *idea* cannot serve as heads of L expressions, they will be marked [–locative] (Fillmore 1968: 48).

Thus, with regard to nouns, the case determines which features a noun must possess in order to fill that slot in the phrase or sentence. In turn, each noun possesses certain features which determine which case slots it is able to fill in a phrase or sentence. Therefore, in order for a phrase or sentence to make sense, the noun and case must match.

Under this approach, verbs are treated differently. Fillmore states:

> The insertion of verbs, on the other hand, depends on the particular array of cases, the 'case frame', provided by the sentence. The verb *run*, for example, may be inserted into the frame [____A]… verbs like *remove* and *open* into [_____ O + A], verbs like *murder* and *terrorize* (that is, verbs requiring 'animate subject' and 'animate object') into [____ D + A], verbs like *give* into [____ O + D + A], and so on (Fillmore 1968: 48–49).

To make the statement above more explicit, let us consider some examples by filling in the frames with lexical items. The simplest frame given above is for the verb *run*. As users of English, we know that this verb has several different meanings (that is, it is highly polysemous), so I must clarify that we will use *run* in what is arguably its most prototypical usage, i.e. propelling oneself forward by alternating use of each of two legs at a pace faster than a walk. The case frame for this usage of *run*, Fillmore claims, is [____A], thus the simplest example would be:

> (8) Sandra *is running*.[48]

[48] I am ignoring tense and aspect in these examples as they are tangential at best to the point of this discussion.

In this example, *Sandra* instantiates the Agentive case and meets the requirements of the case by being an "animate perceived instigator of the action" of running. Let us now examine an example of *terrorize,* whose case frame is [____ D + A], as stated above.

(9) Ollie *terrorizes* the dog.

In this example, *Ollie* instantiates the Agentive case and *the dog* instantiates the Dative case as it is the (unfortunate) animate being affected by the verb *terrorize.*[49]

Fillmore explores the details of different types of the following: case frames; case frame notation; and the subclassification of verbs based on their case frame. I will leave out detail on Fillmore's discussion here, as my goal in presenting this paper is to provide the reader with a basic overview of the origin of frame semantics. I do wish to point out, however, that Fillmore also proposes transformational properties of verbs, which shows us once again that he is approaching this from a generative syntax point of view, thus he still views syntax as primary to semantics at this point in time. He summarizes the foundation of his proposal in this paper as follows:

> … our discussion so far has suggested that the deep structure of (the propositional component of) every simple sentence is an array consisting of a V plus a number of NPs holding special labeled relations (cases) to the sentence. These relations, which are provided for categorically, include such concepts as Agentive, Instrumental, Objective, Factitive, Locative, Benefactive, and perhaps several others… Verbs are subclassified according to the case environments which accept them, and the semantic characterizations of verbs relate them either to specific case elements in the environment or to elements containing features (such as animateness) introduced as obligatory accompaniments of particular cases (Fillmore 1968: 54).

Fillmore dedicates the remainder of this paper to deep structure, surface structure, and transformations, which will not be discussed here. However, prior to that, he does include some remarks on English prepositions and case, which I would like to include and comment on briefly. Fillmore states:

> The rules for English prepositions may look something like this: the A preposition is *by*; the I preposition is *by* if there is no A, otherwise it is *with*; the O and F prepositions are typically *zero*; the B preposition is *for*; the D preposition is typically *to*; the L and T (for time) prepositions are either semantically nonempty (in which case they are introduced as optional choices from the lexicon), or they are selected by the particular associated noun [*on the street*, *at a corner* (=intersection of two streets), *in the corner* (of a room); *on Monday*, *at noon*, *in the afternoon*]. Specific verbs may have associated with them certain requirements for preposition choice that are exceptions to the above generalization (Fillmore 1968: 54).[50]

[49] The order in which the cases appear in the case frames defined by Fillmore is not relevant.

[50] Fillmore provides in a footnote an example of the situation mentioned in the final sentence of the above quote: "The verb *blame*, for example, chooses ('governs') *for* for O and *on* for D. The O preposition is *at* for *look* meaning 'examine', *for* for *look* meaning 'seek', *to* for *listen*, and so forth (Fillmore 1968: 54, footnote 41).

He proceeds to discuss the position of prepositions in the sentence, then states, "The 'universal' character of the base rules is kept intact by the assumption that prepositions, postpositions, and case affixes–**semantically relevant or not**–are all in fact realizations of the same underlying element, say *K* (for *Kasus*)" (Fillmore 1968: 55, emphasis mine). In addition to this quote, earlier on in the paper, Fillmore comments again on prepositions, stating that "even the most elaborate case languages may… have combinations of, say, prepositions with case forms, and… some prepositions have independent semantic content" (Fillmore 1968: 36). Thus, Fillmore's stance on prepositions, at this point in time at least, is that some are case forms (i.e., case markers) and some bear their own semantic load, or a combination thereof. This statement of Fillmore's again reinforces the fact that he is taking a syntactically-centered approach at this point in time. The bolded phrase in the citation above is noteworthy, as it shows the reader that Fillmore believed, even at that time, that prepositions **may** possess semantic content. Another notable aspect I wish to emphasize is that in Fillmore's viewpoint on prepositions–in accordance with the general approach here–each preposition mentioned is named basically as an instantiation of its corresponding case. That is, the preposition itself is not analyzed in terms of its own semantics, but rather viewed as selected by the case, thus the preposition is merely a manifestation of case form.

In closing this paper, Fillmore states:

> One criticism of case grammar that has been brought to my attention is that it is too strongly motivated by semantic considerations. Many of the analyses have (hopefully) the result that certain semantic distinctions and interlanguage commonalities are revealed in fairly direct ways in the deep structures of case grammar, but, it has been argued, syntactic analyses should be based on syntactic data alone and on one language at a time (Fillmore 1968: 119).

He counters this, however, arguing:

> If it is possible to discover a **semantically** justified universal syntactic theory along the lines I have been suggesting… then it is likely that the syntactic deep structure of the type that has been made familiar from the work of Chomsky and his students is going to go the way of the phoneme. It is an artificial intermediate level between the empirically discoverable 'semantic deep structure' and the observationally accessible surface structure, a level the properties of which have more to do with the methodological commitments of grammarians than with the nature of human languages (Fillmore 1968: 119, emphasis mine).

Fillmore's concluding remarks here are significant, for at this point in time, the focus was on syntax, and, as he said, pure syntax, i.e., with no interference from semantics. In presenting the following publications by Fillmore, I show how he progressively abandons the syntax-centric perspective for that of a more semantic-centric one.

3.3.2 Fillmore 1970: On generativity

Fillmore published a paper a few years after *The case for case* titled *On generativity* (Fillmore 1970). In this paper he writes about "the ordinary working grammarian" as a contemporary generative syntactician and identifies some of the fundamental problems with generative syntax to which, however, he offers no solutions. The intention of this paper, I believe, was to question the validity of the theory and to draw attention to the flaws in it–not to propose any solutions.

Fillmore outlines briefly, via a quote from Chomsky himself, the fundamentals of generative grammar:

> The fundamental aim in the linguistic analysis of a language L is to separate the 'grammatical' sequences which are sentences of L from the 'ungrammatical' sequences which are not sentences of L and to study the structure of the grammatical sequences. The grammar of L will thus be a device that generates all of the grammatical sequences of L and none of the ungrammatical ones (Chomsky 1957: 13, as quoted by Fillmore 1970: 4).

Fillmore offers a counterpoint, stating that "[a] proposed grammar can be shown to be incorrect by a demonstration that the set of sentences in the language is not the same as the set of sentences recognized by the grammar" (Fillmore 1970: 5). At this point he does not clarify the intent of this quote, but I interpret this to mean that the grammar, as proposed by generative grammarians at this time, allows for sentences such as the (infamous) one presented by Chomsky in his book *Syntactic Structures* (Chomsky 1957: 15):

> (10) *Colorless green ideas sleep furiously.*

Users of English, recognize immediately that this is not an acceptable sentence of the language, that is, it is not "in the set of sentences of the language", though it is recognized by the grammar. The sentence is grammatically sound, but it is not semantically well-formed. Fillmore argues in this paper that lexical properties as well as structural properties need to be taken into account. He writes:

> What is needed is some apparatus for pairing any strings of words with any structural description, and providing some index of the degree of fit between the description and the string, the value of this index determined by an operation which relates the **lexical** information associated with the individual words of the string with the structural description (Fillmore 1970: 10, emphasis mine).

Thus what Fillmore is alluding to is a kind of system that considers both the syntax and the semantics of the sentence components. He notes, at this point, that George Lakoff had conducted research of the type he describes above (in Lakoff 1965) and emphasizes the importance of the lexical information, stating that "the whole thing depends crucially on having correct information

about the lexical items of the language" (Fillmore 1970: 10). Fillmore then poses some crucial questions about the state of the then current research, writing:

> How are we to discover… what are the correct lexical properties of the words and morphemes of a language? Can it be… that the difficulties of knowing correctly the grammar and semantics of lexical items are of the same order of magnitude as those of determining the grammaticality of sentences? (Fillmore 1970: 10).

As is clear from the points Fillmore makes and the questions he poses throughout this article, he is beginning to deviate from the generative syntax viewpoint and move toward a more semantic-driven approach.

3.3.3 Fillmore 1975: An alternative to checklist theories

By 1975 Fillmore had almost entirely rejected the syntax-centric viewpoint and adopted a semantic-centered one. In his article *An alternative to checklist theories* (Fillmore 1975), he considers two prominent notions in semantics (or at least in cognitive science) at the time: the prototype and the frame. I have discussed prototype theory earlier on in this chapter (see section 3.1), so I will not duplicate that here. I do, however, wish to make known Fillmore's commentary on the experiments conducted on prototype theory. Regarding Labov's cup/bowl study (also discussed in section 3.1), he comments:

> Labov ends up with a complicated function for cuphood that has a built-in range of variation for each of these dimensions. My way of talking about his results is to say, not that they provide us with the function that specifies the boundary conditions for a category, but that they amount to a kind of statistical summary of the strategies that his subjects used in projecting from a familiar repertory of categories onto situations and experiences that were not covered by their associated prototypical scenes (Fillmore 1975: 128).

He expands on this thought further on, stating:

> When you submit subjects to category boundary research, you are actually asking them to make judgments about whether they are willing to extend the frame containing the word under question to a situation not covered by the prototype scene he associates with it, or you are asking him whether he is willing to create a new frame for the new situation borrowing a word from an already existing frame… In general, introspection about appropriate language use in bizarre contexts does not yield highly dependable data for semantic research (Fillmore 1975: 129).

As made explicit by these citations, Fillmore is not convinced that prototype theory on its own is enough. He does believe, however, at this point, that the notions of prototype and frame can work together to "offer us a new… way of looking at a number of questions in linguistic semantics. One obvious way of linking them together is by claiming that in some cases the area of experience on which a linguistic frame imposes order is a prototype" (Fillmore 1975: 123). He

then offers the example of our own bodies and the prototypical way in which we use them to interact with the world which helps us understand concepts such as UP/DOWN, FRONT/BACK, and LEFT/RIGHT.
Regarding the notion of frame as used at that point in time, Fillmore states:

> The frame idea is this. There are certain schemata or frameworks of concepts or terms which link together as a system, which impose structure or coherence on some aspect of human experience, and which may contain elements which are simultaneously parts of other such frameworks (Fillmore 1975: 123).

He also notes that the concept of frame has been discussed by a number of scholars throughout the twentieth century under various labels such as 'associative relations' (Bower 1972) and 'schema' (Bartlett 1932). At the end of his article, he clarifies his definition of the word 'frame', stating:

> In the literature I have examined, the word frame seems to have been introduced by quite various routes, though the sense of organizational coherence is present in all its uses. My own use of the word in linguistics began with the pre-transformational view of a sentence structure as consisting of a frame and a substitution list (a syntagmatic frame and a paradigmatic set of mutually substitutable items); continued with my notion of case frame (a formula for indicating the valence or contextual requirements of a given predicator…); and finished with the concept I have tried to present here [see previous citation above] (Fillmore 1975: 130).

3.3.4 Fillmore 1976: Frame semantics and the nature of language

Again, at this point in time, the frame semantic approach is still not fully developed, but is well on its way. In his 1976 talk at the New York Academy of Science, Fillmore evolves the notion of frame semantics, tying together the ideas of syntax, semantics, and the mind, stating:

> My effort is to look for what can be known about the workings of a language through consideration of the process of communication. A proposal that I favor is that in characterizing a language system we must add to the description of grammar and lexicon a description of the cognitive and interactional "frames" in terms of which the language-user interprets his environment, formulates his own messages, understands the messages of others, and accumulates or creates an internal model of his world (Fillmore 1976: 23).

He articulates this a bit further and arrives at what is now considered one of the fundamentals of the frame semantic approach later on in his talk, stating:

> A particularly important notion, figuring especially in recent works in linguistics, cognitive psychology, and artificial intelligence, is the notion that goes by such names as "frame," "schema," and "scenario." Briefly, the idea is that people have in memory an inventory of schemata for structuring, classifying, and interpreting experiences, and that they have various ways of accessing these schemata… The concept of frame does not

> depend on language, but as applied to language processing the notion figures in the following way. Particular words or speech formulas, or particular grammatical choices, are associated in memory with particular frames, in such a way that exposure to the linguistic form in an appropriate context activates in the perceiver's mind the particular frame–activation of the frame, by turn, enhancing access to the other linguistic material that is associated with the same frame (Fillmore 1976: 25).

In this excerpt, Fillmore alludes to the organization of the mental lexicon language users possess and the way in which they access it by cognizing certain words, phrases, or phrase structures. This is the foundation of frame semantics as we know it today.

In this talk, Fillmore also outlines an example of a cognitive frame which will eventually come to be referred to as the COMMERCIAL TRANSACTION frame and will be discussed at length in further literature (cf. Fillmore 1977). Here he states:

> There is in English, and presumably in every language spoken by a people with a money economy, a semantic domain connected with what we might call the commercial event. The frame for such an event has the form of a scenario containing roles that we can identify as the buyer, the seller, the goods, and the money; containing subevents within which the buyer surrenders the money and takes the goods and the seller surrenders the goods and takes the money; and having certain institutional understandings associated with the ownership changes that take place between the beginning and the end of each such event (Fillmore 1976: 25).

He continues, explaining that there exist many lexical items that can activate this frame and that by cognizing these lexical items, the person has access, in their mind, to the whole commercial event. Some of the lexical items he lists as evoking the frame are: *buy*, *sell*, *pay*, *cost*, *spend*, and *charge* (Fillmore 1976: 25). Thus, when a person hears, reads, or otherwise perceives one of the words listed above, their mind accesses the entire commercial event frame, giving them access to the subevents such as buying, selling, paying, etc. In a later work, Fillmore describes this process in further detail when explicating the term 'frame', stating:

> … I have in mind any system of concepts related in such a way that to understand any one of them you have to understand the whole structure in which it fits; when one of the things in such a structure [such as a lexical item like *buy* or *sell*] is introduced into a text, or into a conversation, all of the others are automatically made available (Fillmore 1982: 111).

3.3.5 Fillmore 1982: Frame semantics

In the article from which the above citation is taken, Fillmore describes his progression from case grammar (Fillmore 1968) to frame semantics. He describes his own case frames as "a kind of mixed syntactic-semantic valence description of verbs" in which " the separate valence patterns seemed to characterize semantic types of verbs, such as verbs of perception, causation movement, etc." (Fillmore 1982: 114). He states the aim of his work on case grammar as "the

development of a ‘valence dictionary’ which was to differ importantly from the kinds of valence dictionaries appearing in Europe… by having its semantic valence taken as basic and by having as much as possible of its syntactic valence accounted for by general rules” (Fillmore 1982: 115). He describes his intention behind the case frames “as characterizing a small abstract ‘scene’ or ‘situation’, so that to understand the semantic structure of the verb it was necessary to understand the properties of such schematized scenes” (Fillmore 1982: 115). These schematized scenes were defined by semantic role notations, but Fillmore eventually found this insufficient in providing semantic description, and thus worked toward finding an approach that would account for all the detail needed to provide an adequate description of semantics.

In this article, Fillmore proposes the concept of frame as follows:

> A ‘frame’, as the notion plays a role in the description of linguistic meanings, is a system of categories structured in accordance with some motivating context. Some words exist in order to provide access to knowledge of such frames to the participants in the communication process, and simultaneously serve to perform a categorization which takes such framing for granted… The motivating context is some body of understandings, some pattern of practices, or some history of social institutions, against which we find intelligible the creation of a particular category in the history of the language community (Fillmore 1982: 119).

Fillmore provides as an illustration of this manner of thinking the English lexical item *weekend*. He explains that language users of English understand this lexical item due to the combination of the seven-day calendric cycle and the structure of many work schedules. In many English speaking communities it is typical to work or go to school during a span of five of those seven calendric units (i.e. days) and to have time away from those institutions for two consecutive days. Fillmore points out that if it were the case that people only had one day off of work or school, there would be no need for the lexical item *weekend*, as language users would probably just use the name of that day. I believe an addendum is necessary here, as we know that there are many counter-examples to the typical five day work week. Fillmore is describing here that this word developed due to the “history of social institutions” (Fillmore 1982: 119), so, despite the fact that this five day work week is not typical for many people in English-speaking communities today, it was at some point in the history of the community. English speakers can now refer to the last day of the work week, regardless of which day of the week it actually is, as being “my Friday”, implying that the speaker has the next two days off from work or school, despite the fact that this may be uttered on, for example, a Tuesday. The cognizer understands this because of their knowledge of the structure of social institutions of the language community.

Fillmore concludes this article emphasizing his argument for:

> a view of the description of meaning-bearing elements in a language according to which words (etc.) come into being only for a reason, that reason being anchored in human experiences and human institutions… The only way in which people can truly be said to understand the use to which these meaning-bearing elements are being put in actual utterances is to understand those experiences and institutions and to know why such

> experiences and institutions gave people reasons to create the categories expressed by the words (Fillmore 1982: 135).

He adds to this that it is the task of semanticists to ascertain and explicate "the precise nature of the relationship between the word and the category, and the precise nature of the relationships between the category and the background" (Fillmore 1982: 135). The manifestation of this is illustrated by Fillmore's FrameNet project which emerges over the next decade of his work (see section 3.3.7).

3.3.6 Fillmore & Atkins 1992: Toward a frame-based lexicon: The semantics of RISK and its neighbors

I have chosen the next publication to discuss because the authors provide discourse comparing frame semantics to semantic field theories (see section 2.2.1) . By this time (the early 1990s) the notion of frame semantics is well developed, thus lending itself to comparison to other competing approaches and theories. Fillmore & Atkins examine the differences between frame semantics and semantic field theories in the following passage:

> Semantic analyses within [semantic] field theories posit systems of paradigmatic and syntagmatic relationships connecting members of selected sets of lexical items. A major activity for lexical semanticists influenced by the field notion is that of cataloguing the kind of interitem relations that can be defined for the elements of a lexicon, and characterizing the kinds of lexical sets that are structured in terms of such relationships… Semantic theories founded on *cognitive frames*… by contrast, approach the description of lexical meaning in a quite different way. In such theories, a word's meaning can be understood only with reference to a structured background of experience, beliefs, or practices, constituting a kind of conceptual prerequisite for understanding the meaning. Speakers can be said to know the meaning of the word only by first understanding the background frames that motivate the concept that the word encodes. Within such an approach, words or word senses are not related to each other directly, word to word, but only by way of their links to common background frames and indications of the manner in which their meanings highlight particular elements of such frames (Fillmore & Atkins 1992: 76–77).

The authors then examine the difference in theory application using the days of the week. They state that the English lexical items *Monday, Tuesday, Wednesday*, *Thursday, Friday, Saturday*, and *Sunday* are viewed as a closed class of words and are related to each other via a relationship of successor, and this type of relationship defines a cycle. Thus each lexical unit in this class is defined in terms of its position in the cycle, and therefore, these items are said to be interdefinable. They are also related via the identical so-called part-of relationship they hold to the English word *week* (Fillmore & Atkins 1992: 77). A frame-based analysis of the days of the week differs in that it focuses on "the manner of their fit into the complete system of *calendric terms*", for a frame-based approach argues that language users understand lexical items in terms of or against background systems, frames, or institutions. Thus, Fillmore and Atkins explain:

> … we can appeal to a frame made up of knowledge about (a) the natural cycle created by the daily apparent travels of the sun, (b) the standard means of reckoning when one day cycle ends and the next one begins, (c) the conventional calendric cycle of 7 days, with a subconvention specifying the beginning member of the cycle, and (d) the practice in our culture of assigning different portions of the weekly cycle to work and nonwork (Fillmore & Atkins 1992: 77).

Comparing the two approaches, one may conclude that the semantic field approach is rather one-dimensional in that the semantic field containing the days of the week does not link up to any other field or any additional background knowledge. It is, in this sense, a rather isolating approach. The frame-based approach, on the other hand, assumes that a decent amount of background knowledge is necessary in order to understand the meaning of the lexical items for the days of the week. By assuming that this background knowledge exists in the mind of the language user, one can account for the fact that other language users can understand that the meaning of an utterance such as *Today is my Friday* uttered on a Tuesday, for example, means that the utterer has two consecutive days off from work or school starting the next day. Considering the viewpoint of the semantic field approach, however, this statement is incomprehensible as the interpretation would be "Today is my [day after Thursday]", as this approach argues that the lexical items for the days of the week are understood in terms of the calendric cycle but does not account for any background knowledge of social or institutional convention.

Fillmore and Atkins' aim in this paper, however, was not to articulate the differences between these two approaches, but rather to examine the frame they call RISK. This is a significant article because it is the first of Fillmore's publications in which a semantic frame is explicated in the amount of detail that is currently used in frame semantic analysis. Fillmore and Atkins begin describing the frame by outlining the kind of lexical items the frame covers, defining the target words as "words whose semantic descriptions share some reference to *the possibility of an unwelcome outcome*". They then list some example target words of the RISK frame as *risk, danger, peril, hazard, gamble, invest, expose, risky, investment,* and *perilously* (Fillmore & Atkins 1992: 79). The authors' data in this study comes from a 25-million-word corpus from which they extracted 1,770 example sentences evoking the RISK frame. Based on the data, Fillmore and Atkins propose the following categories (which will later be called frame elements) that participate in the RISK frame:[51] Chance, Harm, Victim, Valued Object, (Risky) Situation, Deed, Actor, (Intended) Gain, Purpose, Beneficiary, and Motivation. I have generated a table (below) to present the information and the data that they describe in prose:[52]

Category name	Category definition	Example
Chance*	the uncertainty about the future	There is ***a risk*** that the coin will come up heads.[53] (81)

[51] They do note, however, that they are not satisfied with some of the names of categories presented here (Fillmore & Atkins 1992: 81, footnote 12).

[52] The information on category names and definitions comes from Fillmore & Atkins 1992: 81–84; Example sentences are taken from various pages, noted in parentheses after each example.

[53] This example is included in footnote 13 (Fillmore & Atkins 1992: 81); however, it is not an example from the corpus they used in this study.

Harm*	a potential unwelcome development	Leafy vegetables can be consumed without *risking* **a great weight gain**. (92)
Victim	the individual who stands to suffer if the Harm occurs	*the danger* **to the children**[54] (82)
Valued Object	a valued possession of the Victim, seen as potentially endangered	He was being asked to *risk* **his good name** on the battlefield of politics. (87)
(Risky) Situation	the state of affairs within which someone might be said to be at risk	Others had *risked* all **in the war**. (87)
Deed	the act that brings about the risky situation	He had *risked* two of his submarines **by sending them to the edge of the American beaches**. (90)
Actor	the person who performs the Deed that results in the possibility of Harm occurring	**You** put me *at risk*.[55] (83)
(Intended) Gain**	the Actor's hoped-for gain in taking a risk	The men and women of the French resistance, who had fought the underground and *risked* everything **for this day**… (88)
Purpose**	what an Actor intends to accomplish in performing the Deed	Why should he *risk* his life **to try to save Brooks**? (89)
Beneficiary**	the person for whose benefit something is done	Why did he *risk* his life **for a man he did not know**? (88)
Motivation**	the psychological source of the Actor's behavior	She had *risked* so much **for the sake of vanity**. (89)

* Core categories of the RISK frame (They are called 'core' as they are central to our understanding of all the words in the set.)

** Subtypes of the category Goal (i.e., what an Actor has in mind at the time of performing the Deed)

Table 3.2: Components of the RISK frame as described in Fillmore & Atkins 1992 (Fillmore & Atkins 1992: 81–84).

The columns in this table reflect each of the category names proposed by Fillmore and Atkins (category name), the definitions of each category (category definition), and an example of the manifestation of each category (example). Each of the examples I have chosen come from Fillmore and Atkin's article; however, there are a handful of examples that do not stem from the corpus, though they are common usages. I have used footnotes to indicate which examples were

[54] This example is not from the corpus.

[55] Not an example from the corpus.

not taken from the corpus. Regarding notation of the examples, the so-called 'target' (i.e., the lexical item that evokes the cognitive frame) is italicized and the realization of the category bolded. In the case of the category Chance, the target word *risk* is also the realization of the category, thus appears in both italics and bold print. It is fairly common in frame semantic analysis that target nouns will also be one of the core frame elements.

The category names, definitions, and examples in table 3.2 are representative of what we see today in frame semantics; however, Fillmore and Atkins dedicate a significant number of pages afterward to the valence patterns of RISK sentences. In their discussion, they illustrate typical patterns of the way in which the categories are syntactically instantiated, followed by examples. Additionally, they include notes or observations where necessary regarding the pattern or the categories involved. Below is an example of one of these valence patterns:

The Beneficiary can be indicated with the preposition FOR, or with the phrasal preposition FOR THE SAKE OF:

RISK VO{NP} Ben{FOR NP}

Valued Object as D-Object, Beneficiary as PP

Examples:

Why did he risk
VO{his life }
Ben{*for* a man he did not know}? ⟨359 2583⟩

But specialists in the U.S. State Department . . . declared that there was no point in risking
VO{a friendship with 80 million Arabs}
Ben{for the sake of a few thousand Jews.} ⟨314 94⟩

Figure 3.7: Example valence patterns for the frame category Beneficiary within the RISK frame (Fillmore & Atkins 1992: 88)

The box at the top of figure 3.7 shows that within the RISK frame the following pattern occurs: a Valued Object (VO), instantiated as a noun phrase (NP), precedes a Beneficiary (Ben), which is instantiated as the preposition *for* followed by another noun phrase (FOR NP). Underneath the box, the authors note that syntactically the Valued Object is a direct object and the Beneficiary is a prepositional phrase. This is then followed by two corpus examples in which each of the categories is labeled and demarcated by curly brackets. While these valence patterns are noteworthy and worth investigation, frame semantics research as it stands today does not focus much on these patterns.[56]

[56] FrameNet does, however, include computationally generated valence patterns (see figure 3.13).

Fillmore and Atkins also briefly consider the problems with lexicography and polysemy at the end of their article–a discussion that is pertinent to this dissertation. They begin the discussion stating:

> Semanticists studying the polysemy structure of individual lexical items are generally unable to find what they need by examining the "senses" laid out in a typical dictionary entry. The usual lexicographic practice is to identify as separate individual senses those usages for which separate paraphrases are required to fit particular grammatic environments. Thus, if the verb RISK is paraphrased as "put at risk" in one context but "face the risk of" in another context, these must be taken as evidence for different senses of the verb… It ought to be possible to recognize the difference between the kind of polysemy resulting from a transfer of a semantic frame to a new domain (through metonymy or metaphor, for example) and the kind that reflects merely the accommodation of a word to different syntactic patterns (Fillmore & Atkins 1992: 100–101).

They argue for frame semantics as a solution to this issue, stating:

> Frame semantics makes it possible to separate the notion of the conceptual underpinnings of a concept from the precise way in which the words anchored in them get used. We need the means of associating a word (or group of words, or group of word uses) with particular semantic frames, and then to describe the varying ways in which the elements of the frame are given syntactic realization. We ought not to have to regard each of these varying mappings as different senses of the word (Fillmore & Atkins 1992: 101).

This is precisely what I am doing in this dissertation: separating the senses of lexical items by frame and showing how the frame elements (categories) are realized–though I do not explore the syntax or syntactic patterns.

3.3.7 FrameNet

At this point I would like to dedicate some space to the introduction of FrameNet, as it is appropriate chronologically and will also be useful background information for the upcoming discussion of Petruck & Ellsworth 2018. FrameNet is an online database of semantic frames, most of which are connected via relationships of inheritance, perspective, subframe, or causative, to name just a few. Charles Fillmore founded the project in 1997 at the International Computer Science Institute in Berkeley, California, and continued to work on the project with various collaborators until his passing in 2014. Researchers (semanticists and computational linguists alike) continue to work on the project to this day. Currently, FrameNet includes about 1200 frames and over 13,000 lexical unit entries.[57] The lexical units included in FrameNet at present are mostly nouns and verbs, though there are a number of adjectives as well. Other syntactic categories such as adverbs, conjunctions, and prepositions are also represented; however, their

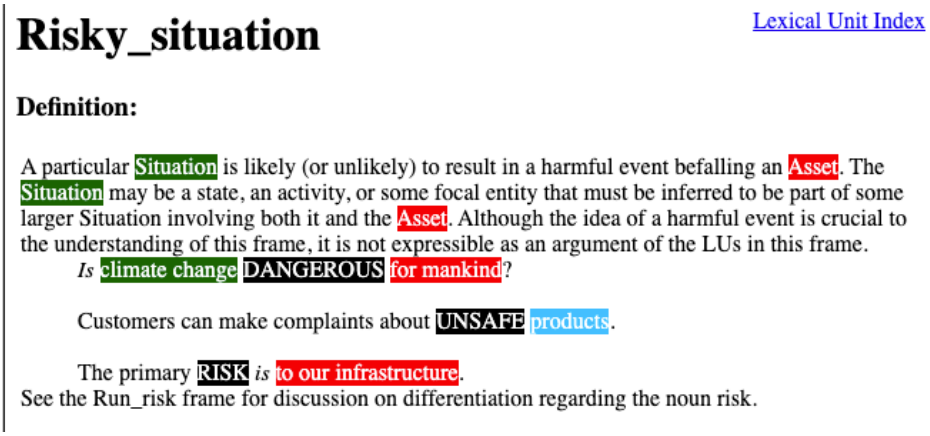
[57] As accessed in May 2020.

coverage is far less. Additionally, a number of FrameNet projects on languages other than English have been established since the original project began. These languages include French, Chinese, Brazilian Portuguese, German, Spanish, Japanese, Swedish, and Korean.[58]

Researchers at FrameNet continue to collaborate on the development of semantic frames to add to the database. All research at FrameNet is based on large corpus data. Sometimes the frames are developed beginning with a concept (such as Risk) and sometimes they are developed starting from a lexical unit or group of lexical units (such as the verb *buy*). In both cases it is crucial to note that the proposed frames are always verified by corpus data.

Each semantic frame is made up of the following information: Frame name, frame definition, frame elements (previously called 'categories'), frame element definitions, examples of instantiations of frame elements, frame to frame relations, and lexical units which evoke the frame (called 'targets'). The entries for targets also include definitions and, in most cases, annotated examples from the corpora.

Because Fillmore and Atkins outlined a version of the RISK frame in their article (Fillmore & Atkins 1992, discussed in 3.3.6 above), I am using FrameNet's representation of this frame as an example of the way in which a semantic frame is represented in the (online) FrameNet database.



Risky_situation

Lexical Unit Index

Definition:

A particular Situation is likely (or unlikely) to result in a harmful event befalling an Asset. The Situation may be a state, an activity, or some focal entity that must be inferred to be part of some larger Situation involving both it and the Asset. Although the idea of a harmful event is crucial to the understanding of this frame, it is not expressible as an argument of the LUs in this frame.

Is climate change DANGEROUS for mankind?

Customers can make complaints about UNSAFE products.

The primary RISK *is* to our infrastructure.

See the Run_risk frame for discussion on differentiation regarding the noun risk.

Figure 3.8: FrameNet's definition of the frame RISKY_SITUATION[59]

At the very top of figure 3.8 is the name given to the semantic frame (here, RISKY_SITUATION). Directly below the frame name is the researchers' definition of the frame and within the definition of the frame there are words highlighted in various colors–these are called frame elements (which Fillmore previously called categories). In the definition of the RISKY_SITUATION frame, we see, due to the fact that they are highlighted, that Situation and Asset are two essential frame elements of this frame. These frame elements (henceforth denoted as FEs) are explicated after the definition of the whole frame and its examples (see figure 3.9 below). The frame definition will often include frame-specific notes, such as the one seen here which states "Although the idea of a harmful event is crucial to the understanding of this frame, it is not expressible as an argument of the LUs [lexical units] in this frame". Following the definition and

[58] Further information can be found at https://framenet.icsi.berkeley.edu/fndrupal/framenets_in_other_languages.

[59] https://framenet.icsi.berkeley.edu/fndrupal/frameIndex

any additional notes about the frame are examples. The word or lexical unit (LU) in all caps and black highlighting is called the target, i.e., the lexical unit that evokes the entire semantic frame. Other words highlighted in various colors are instantiations of the FEs highlighted in the corresponding color. The first sentence, *Is climate change dangerous for mankind?*, for example, shows that the target word is *dangerous*. The FEs in this example are Situation, instantiated by the noun phrase *climate change*, and Asset, instantiated by the prepositional phrase *for mankind.*[60] The subsequent two examples illustrate the various syntactic categories evoking this frame as well as various valence or syntactic patterns. It is often the case that the examples shown here vary syntactically, demonstrating that it is the semantics that is primary in this approach–not the syntax. The second sentence, *Customers can make complaints about unsafe products*, shows the lexical item *unsafe* as the target which evokes the frame and the only FE instantiated here (in light blue highlight) is called Dangerous_entity. The last example sentence provided here, *The primary risk is to our infrastructure*, shows the noun *risk* as the target or frame-evoking LU and the instantiation of the FE Asset by the phrase *to our infrastructure*. Following these example sentences is a note about different senses of the noun *risk* in which the reader is directed to a related semantic frame.

[60] In FrameNet practices, the whole grammatical phrase is taken as the instantiation of the FEs, as valence patterns are also part of the data that may be analyzed by this project. In this example, the Asset is marked as *for mankind*, though *mankind* is the actual Asset.

FEs:

Core:

Asset [ass]	Something judged to be desirable or valuable which might be lost or damaged. Honey is not SAFE for babies.
Dangerous_entity [dan_ent] **Excludes:** Situation	A concrete or abstract entity which may come to cause the loss of, or damage to the Asset. That man is a RISK!
Situation [sit]	The Situation which may lead to a harmful event. Most people agree, going over 100mph *is* UNSAFE.

Non-Core:

Circumstances []	The Circumstances in which an Asset is at risk.
Degree [deg]	A modifier expressing the deviation of the actual level of security from the expected value given the Situation and the state indicated by the target itself. Rogue nations *are* our greatest THREAT.
Domain [dom]	The Domain in which the Situation is safe. All of our websites *are* educationally SAFE.
Frequency []	How often the Asset encounters the Risky_situation.
Place [pla]	A particular location for which the Situation is safe. Frequently, it is to be inferred that the characteristics of the location make various Situations safe or unsafe.
Time [tim]	The time period during which the Situation has the specified level of safety.

FE Core set(s):

{Dangerous_entity, Situation}

Figure 3.9: Frame elements of FrameNet's RISKY_SITUATION frame

Figure 3.9 shows the list of FEs (frame elements) that may be instantiated in this frame. Each one of the FEs in the list is followed by a definition and any relevant observations are noted here. Most of the FE definitions are followed by example sentences in which the FE is instantiated. For clarity, in these examples only the target LU and the FE being defined are highlighted. It is often the case that FEs which appear in many frames, such as Time and Place are not followed by examples.

Directly beneath the heading 'FEs', is the word 'core' followed by the frame elements Asset, Dangerous_entity, and Situation. The concept of 'coreness' basically relates the centrality of an FE to the frame. In the reference work on FrameNet theory and practice, Ruppenhofer et al. explain coreness as follows:

> A core frame element is one that instantiates a conceptually necessary component of a frame, while making the frame unique and different from other frames. For example, in the REVENGE frame, Avenger, Punishment, Offender, Injury, and Injured_party are all

> core frame elements, because an avenging event necessarily includes these participants. One cannot imagine an act of revenge that is not preceded by a (perceived) offense or one that is not directed against anybody (Ruppenhofer et al. 2016: 23).

Thus, according to the information cited above, the frame elements Asset, Dangerous_entity, and Situation are conceptually necessary to the semantic frame RISKY_SITUATION and, therefore, are marked as core frame elements. It should be noted, however, that Dangerous_entity and Situation are listed as being in a 'core set' at the bottom of figure 3.9. This means that only one of these FEs must be instantiated. Ruppenhofer et al. explain, "In our annotation practice, we often find that some groups of FEs seem to act like sets, in that the presence of any member of the set is sufficient to satisfy a semantic valence of the predicator" (Ruppenhofer et al. 2016: 25). As applied to RISKY_SITUATION, this means that either Dangerous_entity or Situation must appear in each example that is said to evoke this frame. Additionally, it is often the case that if one of these core FEs is instantiated, the other (or others) in the core set cannot be. Using this frame as an example again, there are no (acceptable) examples of an utterance that instantiates both Dangerous_entity and Situation. One could, of course, think up some, but many, if not most, native speakers of English would label them as unacceptable. The example I have contrived from the data listed in FrameNet is: *That man and going over 100mph are unsafe*. While English language users understand that both *the man* and the act of *going over 100mph* are unsafe, this utterance would be judged by most native speakers of English as unacceptable. Furthermore, if we look at the semantic valence patterns of each of the LUs listed in this frame, we do not find any instances of examples where both Dangerous_entity and Situation are both instantiated.[61]

Frame-frame Relations:

Inherits from: Gradable_attributes
Is Inherited by:
Perspective on: Risk_scenario
Is Perspectivized in:
Uses:
Is Used by:
Subframe of:
Has Subframe(s):
Precedes:
Is Preceded by:
Is Inchoative of:
Is Causative of:
See also: Run_risk

Lexical Units:

danger.n, dangerous.a, risk.n, riskily.adv, risky.a, safe.a, safely.adv, threat.n, unsafe.a, warm.a

Created by RLG on 07/19/2006 02:46:33 PDT Wed

Figure 3.10: Frame-to-frame relations and LUs in FrameNet's RISKY_SITUATION frame

After the FE definitions and core sets, each frame has dedicated a section to frame relations. Figure 3.10 above lists all the possible types of frame relations within FrameNet and shows the

[61] There are a couple sentences that show instantiation of one of these two FEs in which both of the FEs are labeled; however, upon analyzing the examples, I believe this to be annotator error. I spent a number of years as an annotator at the FrameNet project and believe myself to be an adequate judge of this.

relationships held between RISKY SITUATION and other frames. I will not go into a description of each of these relations here, as the relations shown in my data are slightly different and are explained further in chapter 5; however, it is important to note that almost all frames in FrameNet hold a relationship with at least one other frame, as this demonstrates that semantic frames are not isolated chunks of knowledge in the minds of language users, but rather that they are connected to other semantic frames in the language users' minds.[62]

After the frame-to-frame relations section comes a list of lexical units which evoke the frame, followed by their part of speech. This list of LUs is, in most cases, not a complete list of lexical units which evoke the frame, as FrameNet is an ongoing project and data is continuously added to the database.

Lexical Unit	LU Status	Lexical Entry Report	Annotation Report	Annotator ID	Created Date
danger.n	**Needs_SCs**	Lexical entry	Annotation	RLG	07/26/2006 02:37:53 PDT Wed
dangerous.a	**Finished_Initial**	Lexical entry	Annotation	RLG	07/19/2006 03:21:47 PDT Wed
risk.n	**Needs_SCs**	Lexical entry	Annotation	RLG	07/20/2006 05:21:33 PDT Thu
riskily.adv	**Created**	Lexical entry		RLG	08/14/2006 02:23:37 PDT Mon
risky.a	**Rules_Defined**	Lexical entry	Annotation	RLG	07/20/2006 04:55:05 PDT Thu
safe.a	**Created**	Lexical entry	Annotation	RLG	07/19/2006 03:11:36 PDT Wed
safely.adv	**Rules_Defined**	Lexical entry	Annotation	RLG	08/14/2006 02:24:09 PDT Mon
threat.n	**Created**	Lexical entry	Annotation	RLG	07/26/2006 02:35:23 PDT Wed
unsafe.a	**Needs_SCs**	Lexical entry	Annotation	RLG	07/19/2006 03:20:53 PDT Wed
warm.a	**Created**	Lexical entry		AlK	04/09/2010 11:53:16 PDT Fri

Figure 3.11: Lexical units in FrameNet's RISKY_SITUATION frame

Under the heading "Lexical Entry Report" are links to the LU entries (see figure 3.12 below) and under the heading "Annotation Report" are example annotations (see figure 3.14 below). The LU status column tells the FrameNet researchers (and anyone else using the data, I presume) basically whether or not the FrameNet researchers are finished annotating for the LU. The last two columns are metadata, again mostly for the FrameNet researchers (including information on who annotated the LU and when the LU was entered into the database).

[62] For more information on frame-to-frame relations within FrameNet, see Ruppenhofer et al. 2016 pp.79–85.

Lexical Entry

risk.n

Frame: Risky_situation

Definition:

FN: a situation which could potentially lead to a valuable entity being harmed or lost

Support(s): pose
Controller(s): carry, constitute, spare

Frame Elements and Their Syntactic Realizations

The Frame Elements for this word sense are (with realizations):

Frame Element	Number Annotated	Realization(s)
Asset	(11)	INI.-- (5) N.Dep (1) NP.Ext (1) PP[for].Dep (2) PP[to].Dep (2)
Dangerous_entity	(2)	NP.Ext (2)
Degree	(6)	AJP.Dep (6)
Domain	(1)	A.Dep (1)
Situation	(10)	NP.Ext (8) VPto.Dep (1) INI.-- (1)
Time	(1)	AJP.Dep (1)

Figure 3.12: Lexical entry for the noun *risk* in FrameNet's RISKY_SITUATION frame

Above is the lexical entry report for the noun *risk* in the frame RISKY SITUATION. At the very top is basic information about the LU, including syntactic category and frame name. This is followed by a definition of the LU.[63] Following the definition support or control verbs are listed as well. The table that follows this shows each frame element, the number of times it has been annotated with this LU as a target (clicking on the number will bring up the example sentences), and the syntactic realizations of the FE (the number in parentheses shows the number of times that this is the case). Because I do not focus on the syntax of the frame elements in this dissertation, it is not necessary to discuss the syntactic labels here.[64]

Subsequent to the lexical entry information, illustrated in figure 3.13 below, comes a table showing the valence patterns (both semantic and syntactic!) of the LU under examination, including links to example sentences. The table is rather large, so I have cropped it in order to give the reader just a sense of its appearance in FrameNet.

[63] This definition is often created by FrameNet researchers, hence the 'FN' (meaning FrameNet) preceding the definition.
[64] For this discussion, see Ruppenhofer et al 2016: 53–78.

Valence Patterns:

These frame elements occur in the following syntactic patterns:

Number Annotated	Patterns			
1 TOTAL	Asset			
(1)	NP Ext			
1 TOTAL	Asset	Dangerous_entity		
(1)	PP[to] Dep	NP Ext		
1 TOTAL	Asset	Dangerous_entity	Degree	
(1)	N Dep	NP Ext	AJP Dep	
1 TOTAL	Asset	Degree	Domain	Situation
(1)	INI --	AJP Dep	A Dep	NP Ext
1 TOTAL	Asset	Degree	Situation	
(1)	PP[to] Dep	AJP Dep	NP Ext	
1 TOTAL	Asset	Degree	Situation	Time
(1)	INI --	AJP Dep	NP Ext	AJP Dep
5 TOTAL	Asset	Situation		
(2)	INI --	NP Ext		
(1)	INI --	VPto Dep		

Figure 3.13: Valence patterns of the LU *risk.n* in FrameNet's RISKY_SITUATION frame

This table shows that the LU *risk.n* permits the following semantic valences: Asset only;[65] Asset followed by Dangerous_entity; Asset, Dangerous_entity, Degree, and so forth. Underneath each frame element in the table is its syntactic realization and underneath that is its grammatical function. Again, I am not concerned with syntax or grammar in this dissertation, so I will not discuss these labels here.

Because I follow FrameNet's semantic annotation practices closely in this dissertation, I am including a sample set of annotated sentences of the lexical unit *risk.n* from the RISKY SITUATION frame, as seen in figure 3.14 below. My intention here is to give the reader an idea of how the semantic annotation looks in FrameNet, as my annotation in the following chapters looks very similar. The key at the top of the figure shows which color corresponds to which frame element. It also provides information on the coreness of each frame element.[66]

[65] This example should also include either Dangerous_entity or Situation as they are core frame elements. There appears to be no lexical realization of either of these in the sentence; however, one of the two should be marked as INI (indefinite null instantiation, more information on that later). Thus, the appearance of this semantic valence pattern is due to annotator error.

[66] In addition to 'core' FrameNet uses the labels 'peripheral', 'extra-thematic', and 'core-unexpressed'. I only use the 'core' label in this work, so I will not discuss the other labels. For information on these, see Ruppenhofer et al. 2016: 23–25.

risk.n

Frame Element	Core Type
Asset	Core
Circumstances	Peripheral
Dangerous_entity	Core
Degree	Peripheral
Domain	Extra-Thematic
Frequency	Extra-Thematic
Place	Peripheral
Situation	Core
Time	Peripheral

Turn Colors Off

- unmatched-(1)
  1. But daily consumption of ETU , a component of the fungicides , *posed* a considerable long-term RISK . INI
- added
  1. I personally always thought it was a RISK to pin the image of Microsoft on just one man -- at AOL , for example , there was a conscious effort to develop other `` characters , '' for lack of a better word . INI
- Wcarry-T-(1)
  1. But the buildup *carries* RISKS . INI
  2. A strategy centered on eliminating extremist enclaves in Pakistan *carries* additional RISKS . INI
  3. Airborne attacks *carry* their own set of RISKS for the war effort .
- Wconstitute-T-(1)
  1. According to a poll released Friday by Maariv newspaper , 72 % of Israeli Jews believe that Israeli Arabs *constitute* a RISK to state security .
- Wpresent-T-(1)
- Wpose-T-(1)
  1. The lack of clean drinking water also *poses* a " severe RISK " of diarrhea , salmonella and hepatitis , Iraq 's health minister , Mohamed Sayed , told Britain 's Observer newspaper .
  2. Unexploded bomblets *pose* a special RISK to children , who often believe that they are toys .
  3. Pentagon officials say prisoners are released when they are believed to be of no more intelligence value to interrogators and to *pose* no significant security RISK .
  4. That *poses* a high RISK of civilian casualties in Tripoli , a dense urban landscape with more than 1.6 million people .
  5. On the civilian side , it offered a picture of a rebuilt mosque , along with a warning that " inadequate governance " *posed* a major strategic RISK . INI
- matched-(1)
- unmatched-(1)
  1. But in an indication of the RISKS for the American military here , a U. S. watchdog group said that Iraq had become more hazardous . INI
  2. Shakir chose to withhold his first name to *spare* his family unnecessary RISK .

Figure 3.14: Annotated examples of LU *risk.n* in FrameNet's RISKY_SITUATION frame

Considering the first example sentence from figure 3.14, *But daily consumption of ETU, a component of the fungicides, posed a considerable long-term risk*, we see that the noun phrase *daily consumption of ETU, a component of the fungicides* is highlighted in dark green. Comparing this to the key above, we see dark green corresponds to the frame element Situation, thus this noun phrase has been labeled as Situation. The word *posed* is in italics, meaning it is one of the light verbs frequently used with the target LU *risk.n* (which is highlighted in black and printed in all caps). *Considerable* is highlighted in pink, corresponding to the FE Degree, and *long-term* is highlighted in purple, corresponding to the FE Time.

At the end of the sentence, INI is highlighted in red, corresponding to the FE Asset. The reader will recall that the FEs Asset, Dangerous_entity, and Situation make up the core of this frame, meaning they **must** be instantiated in order to understand the frame (though Dangerous_entity and Situation make up a core set, meaning that only one of them must be expressed). Here it is fitting to discuss the concepts of constructional null instantiation (CNI), definite null instantiation (DNI), and 'indefinite null instantiation' (INI) employed in FrameNet practice, as this occurs in the analysis of my data as well. These concepts are unique to FrameNet, and are introduced by Ruppenhofer et al. as follows:

> Sometimes FEs that are conceptually salient do not show up as lexical or phrasal material in the sentence chosen for annotation. Nevertheless, we indicate their absence since it provides lexicographically relevant information regarding **omissibility conditions**. The

> FE that has been identified indicates which semantic role the missing element would fill, if it were present (Ruppenhofer et al. 2016: 28).

Constructional null instantiation is the simplest occurrence of this. In the case of CNI, it is the grammatical construction of the phrase or sentence which allows the frame element to be omitted. An example of this, as Ruppenhofer et al. demonstrate, appears in the REVENGE frame, which requires an Avenger or Punishment, an Injured_party or Injury, and an Offender. They use the following imperative construction in which the person who is given the order is understood and need not be expressed as an example (Ruppenhofer et al. 2016: 29):

(10) Get even [with her]$_{\text{Offender}}$ [for this]$_{\text{Injury}}$. CNI$_{\text{Avenger}}$

This example shows that the FE Offender is instantiated by the phrase *with her* and the FE Injury is instantiated by *for this*. There is no lexical or phrasal item that instantiates the FE Avenger; however, the Avenger role is understood to be the person being addressed based on the fact that this is an imperative construction, that is, it is directed at an addressee, thus the addressee is understood as the (potential) Avenger. Another common example of CNI is the omitted agent of a passive construction. In a passive construction, it is understood that an agent is involved; however, the agent need not be expressed.

Definite null instantiation (DNI) applies to cases in which the omitted frame element has been named previously in the discourse–though it does not appear in the sentence being annotated–thus the instantiation of the FE is known to the reader or discourse participant despite the fact that it does not appear in the sentence. We can take the example (10) above and imagine that the FE Injury has been left out of the sentence due to the fact that the participants in the discourse have already discussed it. Thus the sentence would read:

(11) Get even [with her]$_{\text{Offender}}$. CNI$_{\text{Avenger}}$ DNI$_{\text{Injury}}$

This is a perfectly acceptable utterance that could occur after Injury had already been discussed between the discourse participants. Because the instantiation of the FE Injury is understood from something previously uttered, it is marked here as DNI.

Indefinite null instantiation (INI) is reserved for cases in which it is understood that something must conceptually fill the role of the FE, but that something is not necessarily defined. The clearest example of this occurs with verbs that can be transitive or intransitive, such as *eat, bake*, and *drink*. Consider the examples below (Ruppenhofer et al: 2016: 28):

(12) Molly rarely **eats** alone.
(13) Granny begins **baking** about a month before Christmas.
(14) Michael even **drinks** heavily on weeknights.

We understand in these examples that: Molly rarely eats some kind food or a meal alone; Granny starts baking some kind of seasonal treat about a month before Christmas; and Michael drinks a lot of alcohol even on weeknights. Though the objects of these verbs are not instantiated in the

sentences (12)–(14) above, they are understood because the language user possesses background knowledge of social institutions and social convention.

As you can see from the discussion above, the basic tenets of Fillmore's frame semantics are reflected in the practices of FrameNet. This citation recapitulates for the reader the tenets and terminology of frame semantics:

> In Frame Semantics… the meaning dimension is expressed in terms of the cognitive structures (frames) that shape speakers' understanding of linguistic expressions… Thus, Frame Semantics is the study of how linguistic forms *evoke* or activate frame knowledge, and how the frames thus activated can be integrated into an understanding of the passages that contain these forms… With respect to the lexicon, we say that each *lexical unit*, the pairing of a word with one of its meanings (Cruse 1986), *evokes* a frame and *profiles* some aspect or component of that frame. The pairing of a word with its background frame means that when we understand a word, we must simultaneously recognize the relevance of the background information within which that word plays an interpretive role (Fillmore 2003) (Fillmore & Baker 2009: 317–318).

These concepts are successfully incorporated into FrameNet and described in detail in the FrameNet handbook by Ruppenhofer et al. (2016). One common criticism of FrameNet, however, is the lack of lexical unit coverage. As of now, FrameNet includes slightly more that 13,000 distinct lexical units, whereas the Oxford English Dictionary currently includes over 170,000 current words (and about 47,000 obsolete words), thus FrameNet researchers still have a lot of work to do. It is, however, an ongoing project with only a handful of researchers, and, of course, funding is always an issue. Nevertheless, FrameNet lexical units are mostly nouns (5571), verbs (5210), and adjectives (2407), while the sum of the remaining parts of speech is 488,[67] which shows that there is a significant gap in coverage of adverbs, prepositions, and various other syntactic categories.

3.3.7.1 Prepositions and spatial relations in FrameNet

The FrameNet researchers have, however, recently undertaken a project in which spatial relations are to be integrated into the database. This endeavor has added a number of frames and prepositional lexical units to the database. Petruck and Ellsworth presented a paper on this undertaking at the First International Workshop on Spatial Language Understanding in New Orleans in 2018. Though the FrameNet researchers recognize that spatial language can be extended into a number of distinct domains, this work is aimed at a Natural Language Processing (NLP) application of describing physical locations, thus no semantic extensions are considered here. The authors note that, at the time of publication, FrameNet expanded to 29 spatial language frames and 409 lexical units that describe spatial relations (Petruck & Ellsworth 2018). They do not, however, break down the latter number into parts of speech. Figure 3.15 (below) shows some of the spatial language frames and their relations in FrameNet.

[67] Data as of May 2020.

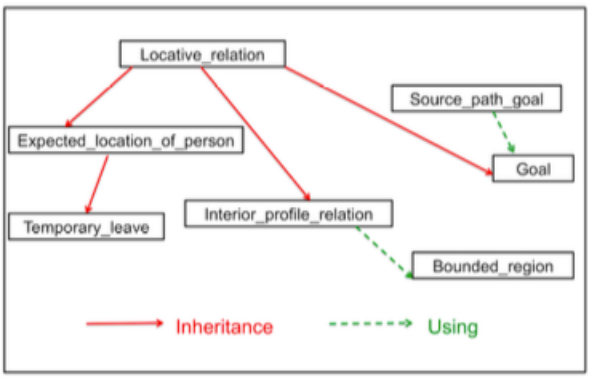


Figure 3.15: Spatial language frame relations in FrameNet (Petruck & Ellsworth 2018: 43)

Petruck and Ellsworth explain:

> The static spatial relations frames [Expected_location_of_person, Interior_profile_relation, and Goal] inherit from Locative_relation, which defines the basic situation where the Figure entity has a location that is determined by means of a relation to the Ground, another entity. These static spatial relations all share this basic structure; moreover, each specific frame also holds a *Using* relation to an image schema that defines the relation between Figure and Ground (Petruck & Ellsworth 2018: 43).

Explicating the frame relations Inheritance and Using, Petruck and Ellsworth state:

> Inheritance exists between a parent frame and a child frame under specific circumstances: for each FE, frame relation, and semantic characteristic in the parent, the same or a more specific corresponding entity in the child exists… Using is a relationship between a child frame and parent frame in which only some of the FEs in the parent have a corresponding entity in the child; if such exist, they are more specific (Petruck & Ellsworth 2018: 43).

In addition to frame relations, FrameNet uses 'semantic types' for spatial language LUs. Figure 3.16 (below) shows the semantic types currently used in FrameNet, along with some examples.

	Semantic Type	Example
Basic Axis System	absolute	to the east of Pam
	viewpoint-based	to the left of Sue
	motion-based	ahead of Paul
	ground-based	to Chuck's left
FN Added	Near_absolute	atop the tree
	Flexible	in front of her

Figure 3.16: Semantic types for spatial LUs as used in FrameNet (Petruck & Ellsworth 2018: 43)

While the authors explain that the semantic types in the basic axis system are based on work by Talmy (Talmy 2000), the two new types introduced by FrameNet researchers "innovate on previous work (Talmy 2000), and derive from FN's fairly recent work on spatial relations" (Petruck & Ellsworth 2018: 44). They explain further:

> … LUs exhibit patterns whereby a default axis system is overridden under specific conditions. Thus, for example, some LUs inflexibly select an absolute direction (e.g., *east*); some normally select an absolute direction, but allow a ground-based one (*atop*); and some default to a ground-based direction (*in front*). FrameNet's semantic types specify the pattern of axis ambiguity a LU exhibits (Petruck & Ellsworth 2018: 44).

The addition of the semantic types Near_absolute and Flexible are crucial for natural language processing, more specifically for visual scene understanding. The semantic types proposed here add to a successful interpretation of a visual image, thus FrameNet's contribution to understanding visual images consists the following:

> 1. training data showing the manifestation of the Figure and Ground roles in language;
> 2. an inventory of frames for spatial situations that any system must recognize (e.g. CONTAINMENT, CONTACT);
> 3. an inventory of semantic types for axis systems and their vectors (Petruck & Ellsworth 2018: 44).

The goal of Petruck and Ellsworth's work here was to illustrate the way in which frame semantics, or rather the FrameNet database, can contribute to visual scene understanding. The authors recognize that the project has focused only on static spatial relations and envision expanding the project to other areas of spatial relations.

I decided to present this paper here, as it is the closest publication, to my knowledge, to application of frame semantics on prepositions. Though the FrameNet researchers did not focus solely on prepositions in their work, any kind of work on spatial language (in the English language, at least) will involve a decent amount of prepositional analysis. It is also a noteworthy foundation for work on semantic extensions of prepositions, as many (if not all) are based on spatial senses.

Another work that has mentioned frame semantics applied to prepositions is the reference work on FrameNet theory and practice by Ruppenhofer et al. (Ruppenhofer et al. 2016). In the section on annotation with a preposition as the target LU, the authors acknowledge that prepositions are not often included as target LUs in frames. They do state, however, that it is often the case that "… prepositions occur as semantically inactive markers of frame elements with some of the lexical units…" (Ruppenhofer et al. 2016: 50). They provide the example sentences *Our exit strategy* ***depends*** *on our entry strategy* and *Don't* ***put up*** *with spam*, stating:

> While in each case the choice of a particular marker preposition must have some historical motivation, there is no clear understanding that the preposition evokes an identifiable frame that could also be evoked by the preposition when it heads a simple clause (Ruppenhofer et al. 2016: 50).

This is a crucial statement for my research in this dissertation, as I aim to show the historical motivation behind the prepositional selection of verbs in Modern German (or New High German) by analyzing prepositional semantics dating back to the Old High German era. The authors do note, however, that "prepositions are appropriate targets of annotation in frames that

cover the vocabulary of space, time, and motion" (Ruppenhofer et al. 2016: 50), just as we have seen in the work of Petruck and Ellsworth discussed above.

3.4 Cognitive semantics and meaning change

Geeraerts writes that cognitive semantics and meaning change are natural companions, stating that "Cognitive semantics has a natural affinity with historical-philological semantics" (Geeraerts 2010: 229). As you will remember from the discussion of historical-philological semantics (h-p semantics) in chapter 2, h-p semantics proponents focused on both the flexibility and the psychology of meaning, thus it should come as no surprise that cognitive semantic researchers also focus on meaning change. In this section I discuss the work of Elizabeth Traugott and Richard Dasher (Traugott & Dasher 2004) on the Invited Inferencing Theory of Semantic Change, followed by a somewhat cognitive approach to prepositional semantic change in the English language by Xavier Dekeyser (Dekeyser 1990).

3.4.1 Traugott and Dasher's Invited Inferencing Theory of Semantic Change

Traugott and Dasher's Invited Inferencing Theory of Semantic Change (IITSC) reflects significant progress in the field, as it illustrates the systematicity of semantic change in a way that the traditional labels, such as amelioration and pejoration, do not. The authors express the aim of the work in their introduction, stating:

> In this book we show that there are predictable paths for semantic change across different conceptual structures and domains of language function. Most especially we will show that, despite century-old taxonomies that suggest meaning changes are bidirectional, e.g. generalization and narrowing, metaphor and metonymy, when we trace the histories of lexemes cross-linguistically we in fact repeatedly find evidence for unidirectional changes (Traugott & Dasher 2004: 1).

Further on, they state:

> The prime objective of IITSC is to account for the conventionalizing of pragmatic meanings and their reanalysis as semantic meanings. Differently put, historically there is a path from coded meanings to utterance-token meanings (IINs) to utterance-type, pragmatically polysemous meanings (GIINs) to new semantically polysemous (coded) meanings (Traugott & Dasher 2004: 35).

The authors illustrate this statement in figure 3.17 below, where SP/W stands for speaker/writer, AD/R for addressee/reader, L for language, M for coded meaning, and C for conceptual structure:

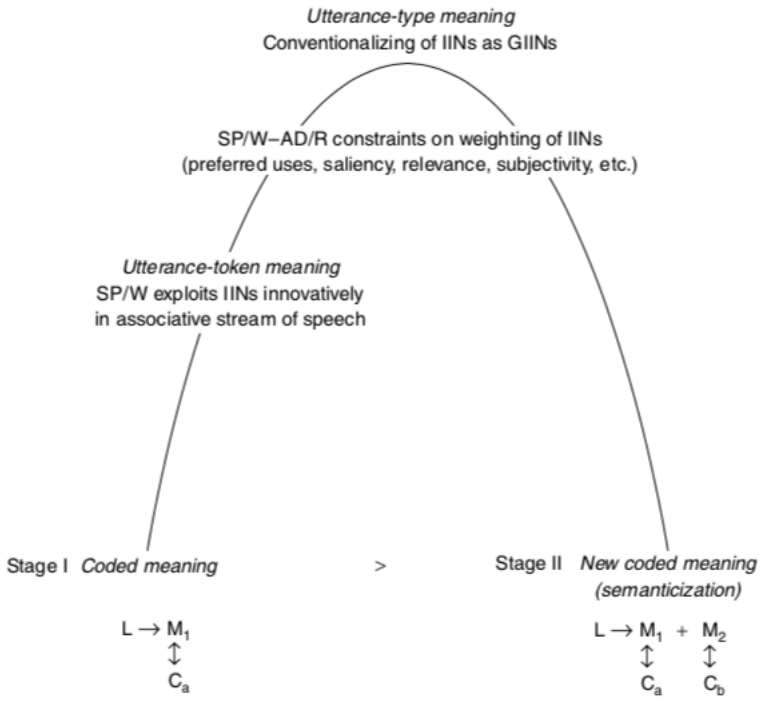


Figure 3.17: Traugott & Dasher's Invited Inferencing Theory of Semantic Change (Traugott & Dasher 2004: 38)

As depicted in the figure above, IITSC consists of two stages with a few steps in between. First, a conventional, coded meaning (Stage I) evolves into an utterance-token meaning in a certain context. This suggests that a novel usage of a word in a certain context occurs and is comprehensible due to that particular context in which it is uttered. Traugott and Dasher explain:

> SP/W may innovate a metaphoric usage of a lexeme in an utterance-token… This new use is an instantaneous development for SP/W; it may or may not be gradual for that individual across the speech style and genres he or she uses. Often such uses do not spread to other speakers, but sometimes they do. In such cases the spread across the community may be gradual, but for each individual acquiring the new meaning the change is instantaneous. Most readers will probably recognize their own experiences along these lines with the (metaphorical and playful) innovation "the millennium-bug," coined to refer to the anticipated problem that some computers might not have been able to handle the date change to the year 2000 (Traugott & Dasher 2004: 34–35).

In the above citation, Traugott and Dasher provide an example of the first step in semantic change, referencing the term *millennium-bug*. This term was used in a very particular context, that is, at the end of the twentieth century and with regard to computers, and it rapidly became wide-spread throughout the language community. The significant point here, though, is that to each language user, this new meaning was instantaneous, i.e., there were no other stages of semantic change leading up to this novel usage.

In the second step of the IITSC, this novel usage (i.e., the utterance-token meaning, such as *millennium-bug* from the previous example) begins to become conventionalized (i.e., becomes an utterance-type meaning), but may still be invalidated. Traugott and Dasher explain as follows:

> Utterance-type meanings… are generalized invited inferences (GIINs). GIINs are preferred meanings, and conventions of use in language-specific communities, but may be canceled. They are crystallized invited inferences associated with certain lexemes or constructions that are specific to a linguistic community, and can be exploited to imply/insinuate certain meanings, e.g. in their function as prepositions *after* and *since* can give rise to and be used to implicate causality. Thus *After the trip to Minnesota she felt very tired* +> "because of the trip she felt very tired"… However, causality is not a coded meaning of *after* or *since* as prepositions, and is easily canceled: *After the trip to Minnesota she felt very tired. It turned out she had been sick for quite some time*. (Traugott & Dasher 2004: 16–17 [footnotes omitted]).

In this example, because the implication that the person felt tired as a result of the trip to Minnesota is broken by the sentence *It turned out she had been sick for quite some time*, the causal meaning of *after* becomes invalidated in this instance. Thus the meaning of *after* has not entered into Stage II (i.e., it has not become a new coded meaning), but is rather still an utterance-type meaning.

In the third step, this utterance-type meaning becomes a new coded meaning (entering into Stage II), which may replace the original meaning or exist alongside it, creating an instance of polysemy. Traugott and Dasher illustrate this using the development of the English phrase *as/so long as*. Providing examples from Old and Middle English texts, they demonstrate that as early as the ninth century, the spatial and temporal meanings of the phrase existed alongside each other. In addition to these two meanings, a conditional meaning existed; however, as the authors note, "… the conditional reading is available if the temporal clause refers to the future, or is generic, but never seems particularly salient" (Traugott & Dasher 2004: 37). By the Early Modern English era, according to the authors, the conditional meaning of *as/so long as* has become more salient. They do note additionally that "the temporal meaning, though present, is not predominant" (Traugott & Dasher 2004: 37). But in the mid-nineteenth century, examples begin occurring in which the conditional seems to be the only possible meaning of the phrase, thus this reading "has been semanticized as a conditional polysemy of temporal *as/so long as*" (Traugott & Dasher 2004: 37). The authors provide two examples of this, shown in (15) and (16) below:

(15) "Would you tell me, please, which way I ought to go from here?"
"That depends a good deal on where you want to get to," said the Cat.
"I don't much care where – " said Alice.
"Then it doesn't matter which way you go," said the Cat.
"– *so long as* I get *somewhere*," Alice added as an explanation.
(1865 Carroll, chapter 6, p.51)

(16) Galligan told the jury that it is proper for police to question a juvenile without a parent present *as long as* they made a "reasonable effort" to notify the parent.

(1990 Aug. 9, United Press Intl.)

In these examples, the temporal reading is not at all present, demonstrating Traugott and Dasher's claim that the conditional meaning of *as/so long as* has become semanticized, thus it has entered into Stage II as a new coded meaning.

Traugott and Dasher explain that the process depicted in Figure 3.17 above is recursive. That is, the new coded meaning of a lexical item (represented by M_2 in the figure) may become the coded meaning M_1 in the bottom left hand corner of the figure and the process begins anew, creating yet another instance of polysemy. They use the case of *as/so long as* to illustrate this, stating:

> In the case of the history of *as long as*, the original M_1 relevant to the development of the temporal meaning was spatial (resulting in M_1 (spatial) + M_2 (temporal)); once we find that the temporal polysemy had arisen, we can "reset" the model so that M_1 is the temporal meaning, which eventually gives rise to the conditional (i.e. M_1 (temporal) + M_2 (conditional)) (Traugott & Dasher 2004: 39).

They note additionally that "In indexing the polysemies, it is, however, essential to keep them separate, since older meanings continue to invite inferences and may themselves undergo change, leading to further developments" (Traugott & Dasher 2004: 39). This brings us back to the importance the authors place on the role of polysemy in semantic change, where they state:

> … if polysemy is needed for diachrony then it should be for synchrony as well. There is no way to account for change except by appealing to structures and processes that exist synchronically. Our view is that polysemy is therefore central to a theory of semantics and semantic change (Traugott & Dasher 2004: 16).

This statement supports the methodology used in this dissertation, as I have analyzed the semantics of the lexical items first within each time period of the language, i.e., synchronically, then examined the meanings across time periods, i.e., diachronically.

While this theory methodically outlines the systematicity of semantic change in general, I believe supplementing Traugott and Dasher's idea using Fillmore's frames produces an even more detailed account of semantic change. In the following chapters I provide a description of German *mit* primarily using Fillmore's frame semantics, but with reference to Traugott and Dasher's Invited Inferencing Theory of Semantic Change– more specifically, referencing figure 3.17.

3.4.2 Dekeyser 1990: The prepositions *with*, *mid*, and *again(st)* in Old and Middle English: A case-study of historical lexical semantics

Xavier Dekeyser conducted a small-scale study published in 1990 on the various meanings of Old and Middle English *wiþ, mid,* and *again(st)*, the etymological equivalents of Modern German *wider, mit*, and *gegen*, respectively. This study is pertinent here, as it is both an example

of an study conducted on semantic change from a cognitive perspective and it concerns a relative of the lexical item analyzed in this dissertation.

Dekeyser's aim in this research, echoing prototype theorists, was to "derive semantic pivots or core meanings" (Dekeyser 1990: 35) of the prepositions under examination. He attempts to undertake this task by using entries from the *Oxford English Dictionary* (OED), the *Middle English Dictionary* (Kurath & Kuhn 1952), and *An Anglo-Saxon Dictionary* (Bosworth & Toller 1898), as searchable corpora for Old and Middle English were not readily available at the time of this research.

In this study, Dekeyser does not consistently appeal to any specific semantic approach and even states that he "thought it wise to fight shy of using the prototypical paradigm in any systematic way: substance is stressed over theory" (Dekeyser 1990: 36), thus his paper merely illustrates the distinct usages of each of the prepositions involved. While this study would have benefitted greatly from the use of a framework of semantic change, the research is still valuable, I believe, as he does illustrate the distinct usages of the prepositions throughout the time periods in question. He does this by providing a few examples of each preposition in Old and Middle English, stating the meanings of each usage, and labelling one of these usages as the core meaning, though he does not thoroughly explicate the rationale for choosing each core meaning– a point where his work would benefit from a framework or theory of semantic change. He does, however, appeal to metaphorical extension in some cases, though his degree of explication is inconsistent throughout the paper.

In Dekeyser's analysis of these prepositions in the Old and Middle English data, he produces the following:

preposition	core meaning	additional meanings
mid	PROXIMITY	Spatial proximity, Association, Interaction, Manner, Instrumentality
wiþ	OPPOSITION and PROXIMITY	Spatial opposition, Directional Opposition, Interactional Opposition, Spatial proximity, Association, Interaction, Instrumentality (Middle English only), Causation (Middle English only)
ongean	OPPOSITION	Spatial opposition, Directional opposition, (Inter)Actional opposition

Table 3.3: Dekeyser's analysis of Old and Middle English *mid, wiþ,* and *ongean* (adapted from Dekeyser 1990: 43)

As you can see from the table above, *mid* and *ongean* are completely distinct, i.e. they have no overlapping meanings. *Wiþ*, on the other hand, possesses only one of its own novel meanings (Causation); however, it covers all the meanings of *mid* and *ongean* (with the exception of Manner, which is adopted by the Modern English period). Because of this, Dekeyser refers to *wiþ* as "the semantic in-between" (Dekeyser 1990: 38).

As users of Modern English, we know that *mid* does not survive as a preposition into the current period (though a relic of it does remain as a prefix containing the meaning of Association in the English word *midwife*). Dekeyser states his theory for the motivation behind the demise of *mid* and the semantic shift of *wiþ* away from the Opposition meaning as follows:

> … the sweeping lexical semantic changes which affected the three prepositions involved were triggered by *wiþ* and the fuzziness of its core meanings as contrasted with *ongean* and *mid*. The oldest prototypical meaning of *wiþer*, and its shortened form *wiþ*, was undoubtedly that of opposition, as it can be traced back to the primitive Germanic dialects (see OED XX: 442)… reciprocity and interaction were important concomitant features of oppositional *wiþ*, but these are also inherent to proximity. This must have given rise to a weakening of the oppositional component, coupled with a gradual shifting to proximity in the course of the Old English period, or perhaps even earlier. This development gained momentum in Middle English: *wiþ* almost entirely lost its meaning of opposition, except for a few collocations, and so fully developed and expanded proximity… the demise of oppositional *wiþ* was only possible because another preposition, viz. *ongean* was available to take over… (Dekeyser 1990: 44).

He also notes that it was *mid* that was lost and not *wiþ* because the latter was the "dynamic member… it was the semantic structure of this preposition that was on the move" (Dekeyser 1990: 44).

While Dekeyser's theory of semantic change with regard to these prepositions seems to be logical, he does not provide concrete evidence supporting his claims, thus more research (i.e., more data to back it up) into this question is needed in order to prove (or disprove!) his assertions. In this dissertation, I undertake the task of describing the semantic change of German *mit* from Old High through Middle High to New High German, accounting for the changes using a cognitive semantic framework and plenty of data to substantiate my claims.

3.5 Concluding remarks

In this chapter I have outlined two of the most prominent cognitive approaches to semantics, namely Prototype Theory (Rosch 1973, Labov 1973) and Conceptual Metaphor Theory (Lakoff & Johnson 1980), each of which is supplemented by studies of prepositions which use each of the theories to some extent (Brenda 2014, Meex 2001). I then provided a detailed account of Charles Fillmore's Frame Semantic approach, including its origins and its current state. The discussion of frame semantics included a detailed explanation of FrameNet, as in the following chapters I have used very similar notation in presenting and analyzing my data. In addition to the presentation of FrameNet, I discussed an article on spatial representation in FrameNet (Petruck & Ellsworth 2018). I concluded this chapter with a discussion of one cognitive approach to meaning change (Traugott & Dasher 2004), which I appeal to in the following chapters, and one study on semantic change of prepositions (Dekeyser 1990).

My intention with this chapter was both to provide the reader with background information on various cognitive approaches to semantic analysis and to illustrate the fact that there is a lack of

published research on the semantic change of non-spatial prepositions. For this reason, it was difficult to find appropriate case studies to supplement the presentation of each of the approaches, thus the studies included are not completely fitting illustrations of the application of each approach. It is my intention in this dissertation to provide more research into the semantic change of non-spatial prepositions using a cognitive framework, more specifically, by using Fillmore's frame semantics and Traugott and Dasher's Invited Inferencing Theory of Semantic Change, thus proposing a framework for researchers to follow when examining lexical semantic change.

CHAPTER 4: METHODOLOGY

The function of this chapter is to outline the methodology used for the current study. As presented in the previous chapter, I have used a combination of Fillmore's frame semantics and Traugott & Dasher's Invited Inferencing Theory of Semantic Change (henceforth, IITSC; Traugott & Dasher 2004) in order to illustrate the synchronic polysemy network of *mit* and demonstrate the ways in which the semantics of the preposition changed throughout the history of the language. This chapter is organized as follows: Section 4.1 briefly restates the objectives of this study. Section 4.2 explains the applicability of the two aforementioned theories to the current undertaking. Section 4.3 describes the data. Section 4.4 recounts the steps taken to analyze the data. Section 4.5 discusses limitations and potential problems with the data and data analysis, and section 4.6 summarizes the main points of the chapter.

4.1 Research Objectives

As stated previously throughout this work, the main objectives of this dissertation are as follows: First, to capture and illustrate the polysemy of the German preposition *mit* in each of the four major time periods of High German (Old High, Middle High, Early New High, and New High). Second, to account for the motivation by which the meaning of the preposition shifts from one time period to the next. And third, to describe the polysemy network(s) of *mit* both synchronically and diachronically.

4.2 Applicability of frame semantics and IITSC

The theories of frame semantics and IITSC apply to different portions of the research undertaken in this dissertation. I begin this section discussing the application of frame semantics to the synchronic component of the research and conclude discussing IITSC and its application to the diachronic component.

4.2.1 Frame Semantics

Frame semantics is suitable for this research for the following reasons: First, its structure serves as an apt system in which the task of disambiguating multiple senses of a particular lexeme can be easily performed. Second, it lends itself readily to relate frames to one another. Third, by using a Frame Semantic approach, an orderly set of data emerges, thereby facilitating a discussion of semantic change.

As explained in section 3.3, a semantic frame is composed of frame elements.[68] While the target word (in the case at hand, German *mit*) is the lexeme that actually evokes a certain frame, the frame elements are the components that must occur together with the target to fulfill certain roles within the utterance and help us disambiguate the multiple senses of a particular lexeme. It is

[68] For a more detailed discussion of Frame semantics and Frame Net, see section 3.3 and 3.3.7 respectively.

precisely the contrast of these frame elements that illustrates the fact that many senses of the word *mit* exist alongside each other. As an example of this phenomenon, let us take a look at two distinct frames evoked by the English preposition *on* as illustrated in FrameNet, namely TOPIC and SPATIAL CONTACT. The following figures show only the frame element section of each of the two aforementioned frames, as this is the area currently under discussion.

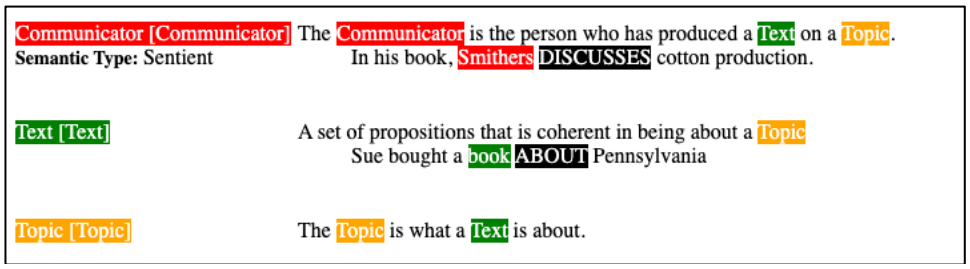


Figure 4.1: Frame elements for FrameNet's TOPIC frame[69]

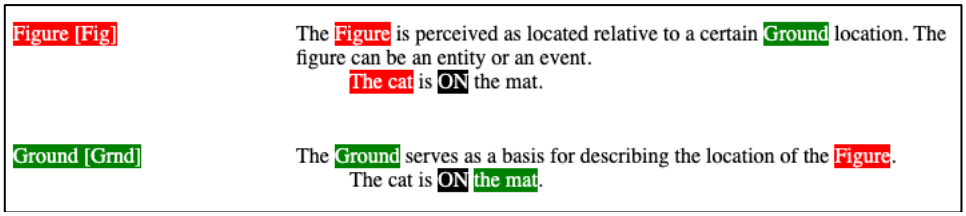


Figure 4.2: Frame elements for FrameNet's SPATIAL CONTACT frame

As illustrated by figures 4.1 and 4.2 above, the frames TOPIC and SPATIAL CONTACT, though each able to be evoked by the English preposition *on*, are comprised of different frame elements. The TOPIC frame requires the frame elements Communicator, Text, and Topic,[70] whereas the SPATIAL CONTACT frame requires Figure and Ground. As demonstrated by these examples, though the English word *on* may evoke multiple frames, it is the instantiation of the frame elements surrounding the target that help us interpret the different senses of the word.

After disambiguating the senses of a lexical item using contrasting frame elements, it then becomes rather straightforward to relate frames to one another, the results of which create a polysemy network–though this does involve the use of additional contemporary semantic notions, such as metaphor and metonymy. As an example of this, let us now turn to two different FrameNet frames which may be evoked by the English preposition *in*, namely INTERIOR PROFILE

[69] FrameNet distinguishes between core and non-core frame elements, as discussed briefly in section 3.3.7. For the purpose of this discussion, only core elements are shown, as these are the components that exemplify the differences between related frames.

[70] The frame elements Communicator and Text belong to a 'core set' in the TOPIC frame. This means that, while either of them may be instantiated as this frame is evoked, only one of them need be. See section 3.3.7 for a more in-depth discussion of core sets.

RELATION and MEDIUM.[71] The following figures once again show only the frame elements of each of their respective frames.

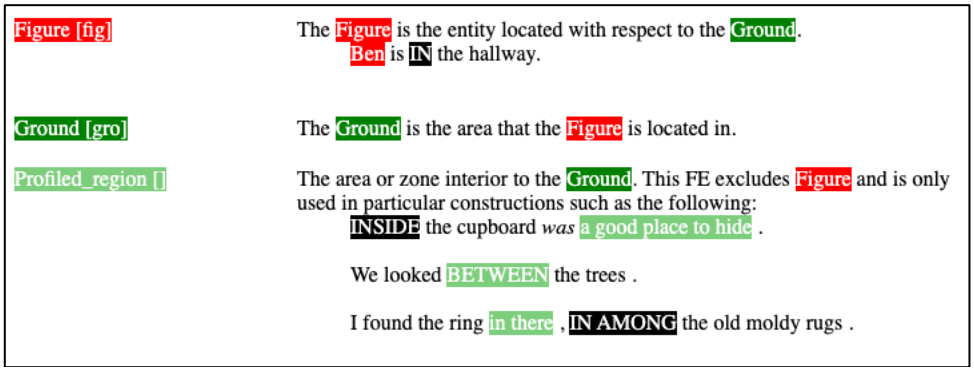


Figure 4.3: Frame elements for FrameNet's INTERIOR PROFILE RELATION frame

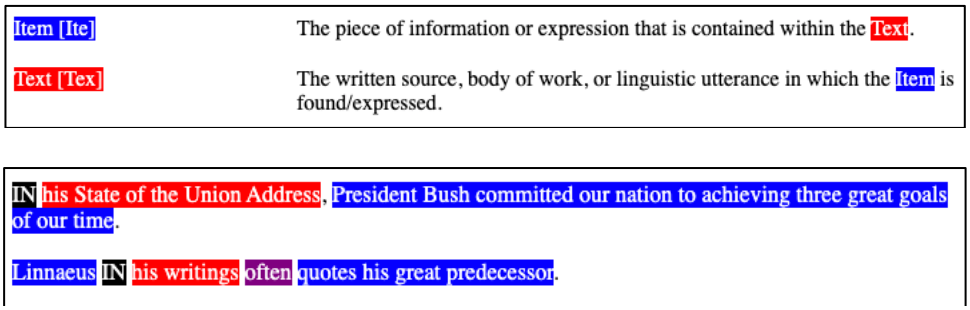


Figure 4.4: Frame elements for FrameNet's MEDIUM frame with examples[72]

As displayed in the figures above, the core frame elements in these two frames (excluding Profiled Region, as it is only used in noted constructions) are Figure and Ground (in INTERIOR PROFILE RELATION) and Item and Text (in MEDIUM). A widely known and well-established metaphor family formulated by Michael Reddy (Reddy 1979) and discussed by Lakoff & Johnson (Lakoff & Johnson 1980) can be readily applied here in order to relate these frame elements–and thereby relating the two frames–namely Reddy's 'conduit metaphor'. Reddy researched language about language and observed that we use a rather elaborate network of metaphor to talk about language. Lakoff & Johnson outline three of the main components of this network as follows (Lakoff & Johnson 1980: 10):

> IDEAS (OR MEANINGS) ARE OBJECTS.
> LINGUISTIC EXPRESSIONS ARE CONTAINERS.
> COMMUNICATION IS SENDING.

[71] I believe this frame needs to be reevaluated and renamed by FrameNet researchers, as it is clearly a metaphorical instantiation of the INTERIOR PROFILE RELATION frame. Admittedly, though, it was created in 2008, before FrameNet began work on representing metaphor in the database.

[72] It is common practice in FrameNet to include examples of the instantiations of each frame element after each frame element definition. This was not done in the MEDIUM frame, so I have also included in Figure 4.4 the example sentences found below the definition of the frame itself.

To illustrate the use of these three metaphors, Lakoff & Johnson provide a list of example utterances. Below are only a handful of these provided examples (Lakoff & Johnson 1980: 11).

> It's hard to *get* that idea *across to* him.
> I *gave* you that idea.
> The introduction *has* a great deal of thought *content*.
> The meaning is right there *in* the words.
> Your words seem *hollow*.
> The idea is *buried in* terribly dense paragraphs.

Applying this family of metaphors to the MEDIUM frame in FrameNet is fairly straightforward if one appeals to the semantic concept of metonymy. Accordingly, we can take one of the metaphors in this family, namely LINGUISTIC EXPRESSIONS ARE CONTAINERS, and propose a metonymic relationship between 'linguistics expressions' and 'texts' (that is, 'texts' as understood in the MEDIUM frame, as it includes books, newspapers, speeches, utterances, etc.). The main component of these texts are linguistic expressions; therefore, using synecdoche (the specific use of metonymy which encompasses part-for-whole and whole-for-part relationships), we can propose that the text itself may represent the linguistic expressions found within it. After establishing this fact, we can then expand the original metaphor to TEXTS ARE CONTAINERS (again, where 'text' is used in the same sense as defined in the MEDIUM frame).

Adopting then the metaphor TEXTS ARE CONTAINERS, we can easily relate the two frames MEDIUM and INTERIOR PROFILE RELATION by highlighting the relation between the frame elements, as proposed in figure 4.5 below.

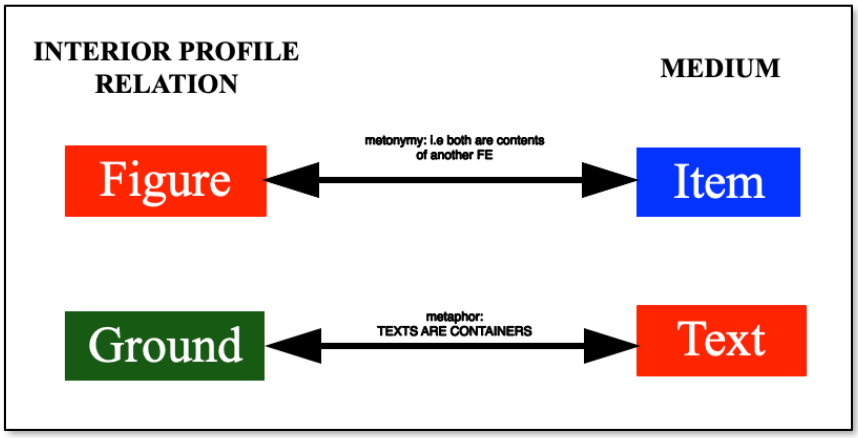


Figure 4.5: Relation between frame elements of INTERIOR PROFILE RELATION and MEDIUM

As displayed in the figure above, the INTERIOR PROFILE RELATION frame element Figure is related to the MEDIUM frame element Item via metonymy, as they are both contents of another frame element, and the INTERIOR PROFILE RELATION frame element Ground is related to the MEDIUM frame element Text via the metaphor TEXTS ARE CONTAINERS. As shown in Figures 4.3 and 4.4 respectively, Figure is defined as 'the entity located with respect to the Ground' and Item as 'the piece of information or expression that is contained within the Text'.

It is important to note here that despite the connection between frame elements of differing frames, the frames themselves are still distinctive and are evoked by distinct usages of a word (in this case, the English preposition *in*), because of their contrasting frame elements.

After examining frame elements present in each frame in this way synchronically, an orderly set of data emerges which readily lends itself to a systematic way of conducting diachronic analysis. This is precisely the point where Traugott & Dasher's Invited Inferencing Theory of Semantic Change becomes applicable.

4.2.2 Invited Inferencing Theory of Semantic Change (IITSC)

As stated previously, I have supplemented Fillmore's Frame Semantic approach with Traugott & Dasher's Invited Inferencing Theory of Semantic Change (IITSC) in this study, as it directly addresses semantic change, whereas Frame Semantics alone does not apply as readily.

Briefly restating and simplifying the theory a bit, IITSC proposes Stage I and Stage II meanings of a word with multiple processes in between.[73] Stage I is the coded (conventional) meaning of a lexeme and Stage II is a new coded meaning. Between Stage I and Stage II are processes in which speakers and/or writers introduce a novel usage of a lexeme and addressees and/or readers are then tasked with reinterpreting the coded meaning. It is during these processes between the two stages that polysemy arises, and, if both Stage I and Stage II meanings continue to exist alongside each other, this polysemy will continue to exist. Additionally, the Stage II meaning can then in turn become a Stage I meaning which undergoes the process and results in a new Stage II meaning, creating even more instances of polysemy, as this process is recursive.

The IITSC is especially applicable to this study in cases of ambiguity. I encountered many instances in the data in which more than one semantic frame seemed to be evoked by the German preposition *mit.* Appealing to the IITSC, we can thus propose that in the time period in which the ambiguous example(s) existed, the lexeme was undergoing the process outlined by Traugott & Dasher and a new coded (Stage II) meaning would soon emerge. This can be then confirmed if the new meaning emerges with unambiguous examples in a later time period.

4.3 The Data

The data used in this study came from four different sources–one for each time period of the language. The target number of examples for each time period was 300, bringing the total number of examples to 1200; however, the actual number of examples varied slightly by time period due to the nature of historical data. By that I mean, there were some extracted examples that were missing words, ambiguous, or otherwise unclear, thus became omitted. Originally, I had extracted 325 examples for the earlier time periods of Old High and Middle High, knowing that some examples may be uninterpretable due to the reasons outlined above, and 315 examples of Early New High and New High, realizing some of these more recent examples may be

[73] See section 3.4.2, especially Figure 3.17, for further detail.

ambiguous due to lack of context. Thus, the Early New High and New High data have slightly more than the target 300 examples, as I did not come up with a solid systematic way of paring down the data.

	mit examples goal	***mit*** examples actual
NHG	300	302
ENHG	300	305
MHG	300	296
OHG	300	297
TOTALS	1200	1200

Table 4.1: Data goal versus actual data examined

4.3.1 Corpora

The following is a brief discussion of each of the corpora used in this study. It should be noted here that freely accessible corpora for the Old High to Early New High periods of the language are rare. At the time of data collection, only one accessible corpus in each of these time periods existed, to the best of my knowledge, and these are the corpora used in my study.

4.3.1.1 Old High German

I used *Referenzkorpus Altdeutsch* for the Old High German data. This lemmatized corpus, consisting of around 650,000 tokens, contains texts written between approximately 750 and 1050. Each example returned from the search is accompanied by relevant metadata including dialect, genre, relation to Latin original (where applicable), text title, and approximate date of appearance. Additionally, the lemmas in this corpus are tagged for various useful information, the most valuable for the study being the following: syntactic category (in order to filter out verb particles), language (to filter out Old Saxon data, as the *Heliand* is also included in this corpus), date of appearance, and language region. Because the corpus is lemmatized, spelling variations are also included in my data. For example, a corpus search for *mit* returns *bit, mt,* etc. as well as cliticized instances of each variant.

4.3.1.2 Middle High German

For the Middle High German data, I worked with *Referenzkorpus Mittelhochdeutsch.* This corpus, also lemmatized, includes a variety of texts from approximately 1050 to 1350 and contains around two million word forms. Each dataset is tagged with metadata such as language area, text title, genre, topic, and date of appearance. The lemmas in this corpus are also tagged for syntactic category.

4.3.1.3 Early New High German

For the period of High German between 1350 and 1650, I used the *Referenzkorpus Frühneuhochdeutsch*, another lemmatized corpus containing approximately seven million words that come from texts of six different genres. Each text is tagged for relevant information such as language area, text title, genre, and date.

4.3.1.4 New High German

For the modern period of High German, I used the *Digitales Wörterbuch der deutschen Sprache* (DWDS), an online collection of corpora covering the time period between 1600 and 2016 with over 12 million tokens. Text types in this corpus include literature, scientific articles, functional literature, blogs, and newspaper articles.

I chose to work with this corpus over other Modern German corpora for several reasons. First, in contrast to others, such as the *deutscher Wortschatz Projekt*, which boasts over 400 million tokens yet only includes newspaper articles, it contains a variety of genres including literature, newspaper articles, and scientific texts. Second, the DWDS contains texts from the entire New High German era, not just the contemporary period, unlike many of the other corpora of Modern German such as *das deutsche Referenzkorpus* (DeReKo).

4.3.2 Data management

In order to store and organize such a large quantity of data, I used FileMaker Pro, a piece of software which is highly customizable and with which it is easy to perform various searches on the data. I imported each piece of data into the database using a KWIC approach with the following information: genre, dialect or language region, text title, date of publication (or date of appearance), and language period. Along with all this information, I created a field for frame elements, two fields for semantic frames (as it is sometimes the case that the semantics are ambiguous between two frames), and additional notes (in case of any observation worth consideration).

It should be noted here that I have normalized the punctuation and (sentential) capitalization in many of the examples in the OHG, MHG, and ENHG periods in order to make the examples more easily interpretable for the reader.

4.4 Data Analysis Methods

In this section, I outline my process of data analysis. I performed this process first on the New High German data, then repeated the process chronologically on the Early New High, Middle High, and Old High German data.

The first step in analysis was to examine each sentence (or sentence fragment) in which the target word *mit* appeared and roughly label frame elements, as in examples (1) and (2) below.

Following FrameNet practice,[74] in many cases I chose rather specific labels for the frame elements rather than the traditional semantic (theta) roles such as Agent, Patient, Theme, etc., though some theta roles were most fitting, such as Instrument and Goal and were used in appropriate instances. In the following examples, the subscript after a highlighted chunk of text indicates that that chunk of text is the instantiation of the subscript frame element.

(1) *…weil die Betreffende die üble Gewohnheit hat, die Temperatur des Badewassers* *action* ***mit*** *dem Ellenbogen* *instrument* *statt* ***mit*** *dem Thermometer* *instrument* *zu messen* *action* *…* (NHG)
…because the person in question had the bad habit of measuring the temperature of the bath water action **with** their elbow instrument instead of **with** the thermometer instrument…

(2) *Dy lesten* *figure 2* *woren eyne stunde* ***mit*** *vns* *figure 1*. (MHG)
The last ones figure 2 were **with** us figure 1 for an hour.

Depicted by the teal (or light gray, if printed in black and white) and purple (or dark gray) highlighted text, example (1) has two constituents which fill the roles of two frame elements, namely Instrument and Action; however, example (2) contains the frame elements Figure 1 and Figure 2, indicating that these two uses of *mit* evoke two distinct frames (INSTRUMENT and TOGETHERNESS respectively) thus are distinct senses of the lexeme.

After roughly labeling the frame elements in each example, I sorted the examples based on similar or identical frame elements (which sometimes involved rethinking and relabeling frame elements). I then examined each of the resulting groups and defined frames based on the data, i.e., which frame elements are required for each sense of the lexeme. After this process, I reexamined the data to be sure each example had been categorized into the proper frame or frames.

Next, I began the task of relating frame elements between frames, employing other semantic concepts such as metaphor and metonymy, before relating entire frames to one another. This process resulted in the (synchronic) polysemy networks presented in the next chapter (see section 5.2). After relating the frames synchronically and documenting which frames existed in which time period or periods, I examined them diachronically to determine the motive by which the semantic change was driven and created diagrams demonstrating these changes (also presented in section 5.2).

4.5 Limitations

Working with historical data comes with its problems–lack of data and genre variation, textual ambiguity, ‘errors’ in texts, etc. These are well-known issues to which there are no perfect solutions as of yet and which must be considered when interpreting the data. For this reason, as you can see in Table 4.1, the numbers of examples extracted from each time period of the

[74] See section 3.3.7 or Ruppenhofer et al. (2016) for more detail on FrameNet practice.

language varies, but only slightly. I removed only a handful of extracted examples in Old High and Middle High due to either sentence fragmentation and/or uninterpretability.

Usage frequency in the data should also be interpreted with caution, as the number of each example usage of *mit* may be skewed due to the compilation of texts in each corpus. For example, in the Middle High German data, there is a rather high number of example usages of *mit* evoking the AMALGAMATION frame (37 to be precise), but only 3 examples in Early New High German and 3 examples in New High German (cf. table 5.12 in section 5.1.1.12). This does not necessarily mean that the AMALGAMATION frame is less likely to be evoked by *mit* in those two periods, but rather may be a reflection of the type of texts used in the corpora. The Middle High German corpus includes a text called *Das Buch von guter Speise* ('The Book of Good Food'); however, neither the Early New High nor the New High corpora include this genre.

It should be noted at this point as well, that this is not an exhaustive study. I have analyzed only approximately 300 examples from each time period of the language. Because of the limited number of examples, there may be less frequent usages of *mit* that are not captured by the data in this study. A larger amount of data would need to be collected and analyzed in order to ensure all usages have been accounted for.

4.6 Summary

The objective of this chapter was to outline the methodology used in this study. This included a brief review of the research objectives, a discussion of the applicability of Frame Semantics and IITSC to the current study, a description of the data examined, and an outline of the steps taken to analyze the data. Limitations of this study were also discussed briefly at the end of the chapter.

The following chapter provides descriptions of semantic frames and frame relations found in the data. Additionally it includes visual representation of both synchronic and diachronic polysemy networks and a comparison of the findings to a handful of authoritative works that address the semantics of *mit*.

CHAPTER 5: FINDINGS

The main objectives of this study were to examine the polysemy of German *mit* throughout the (documented) history of the language, account for the motivation behind the meaning changes of *mit*, and to describe the polysemy network of *mit* both synchronically and diachronically. All of this has been done using corpus data as discussed in detail chapter 4. In the current chapter, I present the results of my data as follows. Section 5.1 outlines each of the 25 frames found to be evoked by *mit,* including examples from each major time period of the language (where applicable) and discussion of frame-to-frame relations. Section 5.2 includes figures describing the polysemy networks of *mit* both synchronically and diachronically with observations on the meaning change across the four time periods examined. Section 5.3 compares the findings of the data to a sample of traditional dictionaries and grammars. Finally, section 5.4 summarizes the major points of the chapter.

5.1 Frames evoked by German *mit*

According to my analysis of the data collected, there exist 25 lexical frames evoked by *mit* throughout the four time periods examined. These frames are all related to each other in various ways (see section 5.2 for visual representation of the full polysemy network).[75] The highest-level frame, i.e., the frame that encompasses all the other frames evoking *mit*, I have labeled CONCOMITANCE and determined–following FrameNet practices–to be a so-called non-lexical frame. This type of frame is posited in order to relate frames to a common ancestor frame in a logical manner. In a non-lexical frame, there are no lexical items that evoke the frame specifically; however, with regard to the proposed top-level frame CONCOMITANCE, there may be lexical items other than *mit* which evoke this frame. In order to determine whether or not the frame is actually non-lexical, one would need to conduct a different study entirely, but for the purpose of this study, I will call it non-lexical, as *mit* does not evoke it directly.[76] I have named this top-level, non-lexical frame CONCOMITANCE because the most basic senses of *mit* relate two objects, events, or situations that exist or occur together spatially or two objects, events, or situations witch exist or occur simultaneously, i.e. temporally. Thus, the frame elements of CONCOMITANCE are labeled Occurrence 1 and Occurrence 2, both of which encompass spatial as well as temporal objects or events.

Inheriting from this highest-level frame are four additional non-lexical frames to which all of the 25 lexical frames relate. These mid-level frames can be thought of as specific types of CONCOMITANCE and are named: LOCATIVE_CONCOMITANCE, TEMPORAL_CONCOMITANCE, RECIPROCAL_CONCOMITANCE , and INSTRUMENTAL_CONCOMITANCE (examples of each of these frames will be given in the respective subsections below). Again, following FrameNet practice, these frames are said to *inherit* from CONCOMITANCE. In this type of frame relation (*inheritance*),

[75] As stated in the previous chapter, though a general idea of the picture of the polysemy network of *mit* across the four major time periods of the language has emerged from the data in this study, it should not be seen as exhaustive. More data is required to confirm these findings.

[76] It is plausible that a coordinating conjunction, such as *und* may evoke CONCOMITANCE; however, that would be a topic for another investigation.

"anything which is strictly true about the semantics of the Parent [frame] must correspond to an equally [sic] or more specific fact about the Child [frame] (Ruppenhofer, et al. 2016: 75).

The following sections are organized by these mid-level frames. More specifically, section 5.1.1 discusses the LOCATIVE_CONCOMITANCE frame, section 5.1.2 discusses TEMPORAL_CONCOMITANCE, 5.1.3 discusses RECIPROCAL_CONCOMITANCE, and section 5.1.4 discusses INSTRUMENTAL_CONCOMITANCE. Each subsection underneath the mid-level frames examines the frames related directly to the mid-level frame.

5.1.1 LOCATIVE_CONCOMITANCE

The mid-level, non-lexical frame LOCATIVE_CONCOMITANCE involves two entities which simply exist in the same space, as in the English sentence *They sat with her*. In this example, *they* and *her* would be the two beings who are located in the same vicinity.[77] These two objects thus make up the two required frame elements of the frame. I have called them Entity 1 and Entity 2. The three frames which inherit directly from LOCATIVE_CONCOMITANCE each require FEs that relate to the FEs of the parent frame (in this case, LOCATIVE_CONCOMITANCE). The specifics of the relationships are discussed in each subsection below.

The frames in this section all relate back to LOCATIVE_CONCOMITANCE, immediately or not, as displayed in figure 5.1 below. The three frames which inherit directly from LOCATIVE_CONCOMITANCE are called DIRECTIONALITY, TOGETHERNESS, and CONTAINMENT and are discussed in the following subsections in no particular order. Frame discussion continues down the inheritance tree in a logical manner.

[77] It should be noted here that I am not claiming that English *with* evokes this frame, as a more rigorous study of the preposition would be required. My aim with this example is merely to give the reader a sense of the frame.

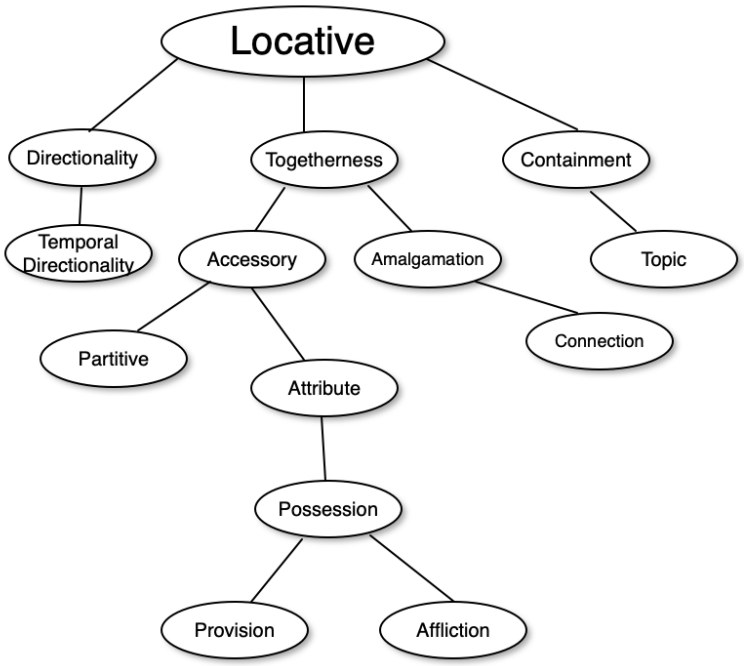


Figure 5.1: Polysemy network of *mit* under LOCATIVE_CONCOMITANCE

5.1.1.1 DIRECTIONALITY

The first lexical frame under discussion in this section is called DIRECTIONALITY. The two frame elements required to occur alongside *mit* in order to evoke this frame are Vehicle and Force. The Vehicle is instantiated as either an actual vehicle, such as *thaz skef in mittemo seuue* in example (1) below, or a person such as *wir* in both example (2) and (3). In the latter examples, the person is understood to be in a vehicle, thus the person stands metonymically for the vehicle, as evidence by the verbs *zuofuhren* and *segeln*. The Force is instantiated as a force of nature, such as *then undon* or *eynem grossen sturmwind* as in examples (1) and (2), respectively.

In the examples below, the Vehicle is highlighted in teal (light gray if printed in black and white) and the Force is highlighted in purple (dark gray if printed in black and white).[78]

[78] All translations into English are my own. I have tried to keep the translations as literal as possible, unless otherwise noted. Also, I have tried to keep the word order as close as possible to the original text, sometimes resulting in rather oddly-formed English utterances. Additionally, in some cases of OHG, MHG, and ENHG, I have standardized the punctuation and capitalization for ease of interpretation.

In some instances, due to lack of context (a pitfall of using the keyword in context method), an example may have been difficult to interpret. Often I was able to find the full citation, but not always. In the latter cases, I have used my best judgement interpreting and translating the text; however, it may be the case that a handful of examples have been misinterpreted, thus mistranslated. I am deeply indebted to Professor Thomas F. Shannon and Professor Emerita Irmengard Rauch for lending me their years of expertise on these matters.

(1) *Thaz skef in mittemo seuue uuas givvuorphozit* ***mit*** *then undon*. (OHG)
The ship in the middle of the sea was rocking **with** the waves.

(2) *Die nacht vor aller heyligen tag / fuhren wir von Barbaria* ***mit*** (ENHG)
eynem grossen sturmwind nach Prasilien zuo.
The night before All Saints' Day, we traveled **with** a heavy gale from Barbaria to Brazil.

(3) *Wir siegelten hin durch das meer* ***mit*** *guotem winde*. (ENHG)
We sailed through the sea **with** a good wind.

Vehicle is a more specific frame element corresponding to Entity 1 of the parent frame LOCATIVE_CONCOMITANCE and Force is a more specific frame element corresponding to Entity 2 of the parent frame. The instantiations of the two FEs exist together in the same space, as in the parent frame, but additionally, both the instantiation of Vehicle and the instantiation Force are moving in the same direction. Thus, *mit* in this frame indicates that the Vehicle and the Force both exist in the same space and are moving in the same direction.

Though only three examples of this frame appear in the corpus–and only in the OHG and ENHG periods for that matter–it should be noted that this sense of *mit* is still use in NHG today in relatively common utterances such as *mit der Strömung rudern* ('to row with the current'), as listed in Duden's *Onlinewörterbuch*, and *mit der Strömung schwimmen* ('to swim with the current').

The following table shows the breakdown of the data. The first column is headed by the name of the frame and followed by the time periods. Under the second column (labeled "clear"), are listed the number of times *mit* evoked the frame under discussion and no other frame. Under the third column (labeled "ambiguous"), are the number of times *mit* evoked the frame under discussion **and** another frame. The final column (labeled "total") shows the total number of times the frame was evoked by *mit* in the data (clear plus ambiguous examples) in each time period. The final row labeled total, on the other hand, shows (from left to right) the total amount of times *mit* evoked only the frame under discussion across all time periods, then the amount of times it evoked the frame under discussion plus another frame across all time periods, and finally the total number of times *mit* evoked the pertinent frame (clear plus ambiguous examples) across all time periods.

DIRECTIONALITY	clear	ambiguous	total
OHG	1	0	1
MHG	0	0	0
ENHG	2	0	2
NHG	0	0	0
total	3	0	3

Table 5.1: DIRECTIONALITY data

5.1.1.2 TEMPORAL_DIRECTIONALITY

Relating metaphorically from DIRECTIONALITY is the frame TEMPORAL_DIRECTIONALITY. The two frame elements required along with *mit* to evoke this frame are Entity or Person and Time. The FEs Entity and Person belong to a core set, meaning that only one of them can be instantiated.[79] The FE Entity is instantiated by an object, such as *ihre Ausstattung* in example (4). Person is instantiated by a living being (not necessarily a person) such as *ich* in example (5), and Time is instantiated by a time expression, such as *Zeit* and *Freitag* in examples (4) and (5), respectively.[80]

In the examples below, the Person and Entity are highlighted in teal (light gray if printed in black and white) and the FE Time is highlighted in purple (dark gray if printed in black and white).

(4) *Deswegen muß ihre Ausstattung* ***mit*** *der Zeit mitgehen…* (NHG)
Therefore, her/their equipment must move **with** the times…

(5) *Dann wieder - und das lag wahrscheinlich daran, daß ich* ***mit*** *Freitag eingesperrt war - kam mir die Wohnung wie ein Tier vor.* (NHG)
Then, once again, and that probably had to do with the fact that I had been locked in **since** Friday, the apartment felt to me like an animal.

This frame is related via metaphor to the DIRECTIONALITY frame. More specifically via two different metaphors, TIME IS A MOVING OBJECT and TIME IS STATIONARY AND WE MOVE THROUGH IT (Lakoff & Johnson 1980: 42–44). The frame elements of the two frames are related as follows. First, the frame elements belonging to the core set, Person and Entity, correlate to Vehicle, and Force correlates to Time. Examining the two examples below, we can see that both these time metaphors are represented. Example (4) employs the TIME IS A MOVING OBJECT metaphor, as *der Zeit*, the instantiation of Time, is portrayed as a moving object, like the FE Force. Example (5), on the other hand, employs the metaphor TIME IS A STATIONARY OBJECT AND WE MOVE THROUGH IT, as *Freitag*, the instantiation of Time is expressed as a non-moving point in time, and *ich*, the instantiation of Person, is expressed as a moving entity.

Though only two examples of this frame appeared in the corpus, both coming from the NHG period as shown in table 5.2 below, this is not to claim that this usage did not exist in the older time periods. This is a fairly common usage in NHG, as in common expressions such as *mit der Zeit* ('gradually') and *mit den Jahren* ('with age/as one gets older'), though it only appears twice in the corpus.

[79] For more detailed discussion of core sets, see section 3.3.7.

[80] It is possible that instantiations of these FEs may vary more broadly; however, due to the lack of examples, I cannot state this definitively.

TEMPORAL_DIRECTIONALITY	clear	ambiguous	total
OHG	0	0	0
MHG	0	0	0
ENHG	0	0	0
NHG	2	0	2
total	2	0	2

Table 5.2: TEMPORAL_DIRECTIONALITY data

5.1.1.3 CONTAINMENT

The second frame inheriting from LOCATIVE_CONCOMITANCE is CONTAINMENT. The frame elements required along with *mit* in order to evoke this frame are Container and Contents. Sometimes the Container is instantiated by typical containers such as *thiu faz*, *ein glas*, *die zwey loegelin*, or *eine Bonbonniere* shown in examples (7), (14), (15), and (17) respectively, and filled with things that one might typically find in such a container, such as *uuazaru* in example (7), *Balsam* in example (15) or *Schokoladenpralinés* in example (17). It is sometimes the case, however, that the Container is instantiated by a being (or a part of a being) and the Contents an emotion or experience, such as *er* as the Container and *temo harme, temo spotte* as the Contents in example (6) or *din herze* as the Container and *grozen bekoringen inde bedruofenisse* as the Contents in example (10). These examples are not surprising, as many things are conceptualized in terms of containers–even time! The metaphor CALENDRIC UNITS ARE CONTAINERS accounts for examples such as (9) in which the instantiation of the frame element Container is *der tach*. Additionally, the metaphor TEXTS ARE CONTAINERS (discussed previously in section 4.2.1) accounts for example (21) in which *die Sätze* contain the emotion *Zorn*.

In the examples below, the instantiation of Container is highlighted in teal (light gray if printed in black and white) and the Contents is highlighted in purple (dark gray if printed in black and white).

(6) *After diu, do er gesatot uuard* ***mit*** *temo harme unde* ***mit*** *temo spotte*... (OHG)
Afterward, as he was filled **with** the pain and **with** the ridicule…

(7) *Thó quad ín ther heilant: fullet thiu faz* ***mit*** *uuazaru*. (OHG)
Then the holy one said to them: Fill the vessel **with** water(-INSTR).

Example (7) above is ambiguous. This could be an example of the frame under discussion, as *thiu faz* is a typical container and *uuazara* typical contents of a container; however, this sense of *mit* may also evoke the frame MATERIAL. In that case, *fullet thiu faz* would be the Action and *uuazaru* the Material. Grammatical evidence for this interpretation is provided by the instrumental case ending *-u* on *uuazaru*. This case ending, which only occurs in the OHG time period, is found frequently on noun phrases following *mit* in the frames INSTRUMENT and MATERIAL (which inherits from INSTRUMENT).

(8) *... bithiu ir ladet man* ***mit*** *lesti thia sie fortragan ni mugun...* (OHG)
… because you all load men **with** burdens which they cannot endure…

Example (8) above is also ambiguous. One interpretation is the CONTAINMENT interpretation, in which *man* is the Container and *lesti thia sie fortragan ni mugun* the Contents; however, another reading of this may be AFFLICTION, in which *man* is the Being and *lesti thia sie fortragan ni* is the Affliction.

(9) *Daz ist der tach den niemen* ***mit*** *lobe noch* ***mit*** *eren eruullen mach.* (MHG)
That is the day which no one may imbue **with** praise or **with** honor.

(10) *... als he din herze vullit* ***bit*** *grozen bekoringen inde bedruofenisse.* (MHG)
… as he fills your heart **with** great temptations and wants.

(11) *Folle ist div erde* ***mit*** *sinem worte...* (MHG)
Full/rich is the earth **with** his word…

(12) *O du sues sper, dye seyten xpin hat dych erfullt* ***mit*** *pluet.* (ENHG)
O you sweet spear, the sides Christ filled you up **with** blood.

(13) *Iten ano dem .xlviii. qarta p luce komend .iiij. schiff* ***mit*** *bilgerin...* (ENHG)
In the same year, forty-eight, fourth, at dawn come four ships **with** pilgrims…

(14) *... hat Maria, die Schwester Lazari, jhme abermals nach etlichen verschienen tagen ein glas* ***mit*** *kostlichen Nardenwassers vber sejn haupt ab gegossen...* (ENHG)
… Maria, the sister of Lazarus, again after several days passed, poured a glass **with** fragrant spikenard water over his head…

(15) *... saß Fierrabras zuo roß / vnnd hing neben sich die zwey loegelin* ***mit*** *Balsam....* (ENHG)
… Fierrabras sat on his horse and and hung next to him the two small bottles **with** balm…

(16) *Da meyneten wir das schiff* ***mit*** *Prasilien holtz zu laden...* (ENHG)
There we intended to load the ship **with** Brazilian wood…

(17) *Silvelie stand hinter einem Tisch und füllte eine Bonbonniere* ***mit*** *Schokoladenpralinés...* (NHG)
Silvelie stood behind a table and filled a chocolate box **with** chocolate pralines…

(18) *… daß 8 Wagenladungen* ***mit*** *230000 Büchern und Urkunden, die während des Krieges nach Deutschland gebracht wurden...* (NHG)
… that 8 truckloads **with** 230,000 books and documents, which were brought to Germany during the war…

(19) *Aber ein Zimmer* ***mit*** *so viel Gegenständen wie das unsrige hält sich nicht selbst in Ordnung.* (NHG)
But a room like ours **with** so many objects does not keep itself in order.

Example (19) above is ambiguous as well. The ATTRIBUTE interpretation could fit here in addition to the CONTAINMENT interpretation, with *ein Zimmer wie das unsrige* instantiating the Entity and *so viel Gegenständen* the Attribute.

(20) *Mehrere* ***mit*** *Geschützen und Infanterie beladene Fahren wurden durch Artillerie vernichtet…* (NHG)
Several vehicles loaded **with** guns and infantry were destroyed by artillery…

(21) *Er ist keinem seiner Sätze untreu, der Zorn über das Dasein füllt die Sätze des Romans auch syntaktisch* ***mit*** *Zorn.* (NHG)
He is not unfaithful to any of his sentences, the anger about the Dasein fills the sentences of the novel even syntactically **with** anger.

As stated above, this frame inherits from LOCATIVE_CONCOMITANCE. The FE Container is a more specific correlate to the parent frame element Entity 1 and Contents is a more specific correlate to Entity 2. The two FEs Container and Contents exist in the same space, like Entity 1 and Entity 2, but hold a more specific relation to one another, i.e., a relationship of containment. This frame is occurs across all time periods, as shown in table 5.3 below.

CONTAINMENT	clear	ambiguous	total
OHG	2	2	4[81]
MHG	4	0	4
ENHG	9	3	12
NHG	9	9	18
total	24	14	38

Table 5.3: CONTAINMENT data

5.1.1.4 TOPIC

Related to CONTAINMENT via the metaphor TEXTS ARE CONTAINERS (discussed previously in chapter 4) is the frame TOPIC. The frame elements required to occur together with *mit* in order to evoke this frame are Topic and Work. The FE Topic is instantiated by a concept about which a work or text is based. In the data, the instantiations of Topic range from *uuibe* in example (22) to *dem See* in (27). The FE Work, on the other hand, is restricted to types of work or thought, such as *mannes sacha* in example (22), *die Predig, die er im Schiff gehalten* in example (23), and *die dumme Geschichte* in (27).

[81] "Example" in this table means number of occurrences of *mit*, not number of example sentences containing *mit*. This holds for all data tables in this chapter.

In the examples below, the Work is highlighted in teal (light gray if printed in black and white) and the Topic is highlighted in purple (dark gray if printed in black and white).

(22) *Oba so ist mannes sacha* ***mit*** *uuibe, thanne nist biderbi zi gihiuuenne.* (OHG)
If such is mankind's concern **with** woman, then it is not advantageous to marry.

(23) *… als die Predig / die er im Schiff gehalten* / ***mit*** *einem wunderbarlichen Fischfang*. (ENHG)
… like the sermon / which he held on the ship / **about** a miraculous fish-catch.

(24) *Luc. 5, die er auff dem Berg gehalten* / ***mit*** *Reinigung deß Aussaetzigen*. (ENHG)
Luke 5, which he held on the mountain **about** purifying the lepers.

(25) *Matth. 7, die er im Hauß gehalten* / ***mit*** *Auffrichtung deß Gichtbruechigen*.[82] (ENHG)
Matthew 7, which he held in the house / **about** raising the people sick with palsy.

(26) *Wir meinen, daß man die Arbeit* ***mit*** *verdichtenden Formen weder als formalistischen Eskapismus abqualifizieren noch als klassenspezifische Realitätsuntüchtigkeit erklären kann…* (NHG)
We think that you can neither dismiss the work **with** compressed shapes as formalistic escapism nor explain [it] as class-specific reality-incompetency…

(27) *"Du weißt also nicht die dumme Geschichte* ***mit*** *dem See", sagt sie beklommen.* (NHG)
"You don't know the stupid story **with/about** the sea," she says anxiously.

(28) *Am Donnerstag. 15. November, 17 Uhr, beginnt Elisabeth v. Schmidt-Pauli in der Universität, Hörsaal 218, ihren Vortragszyklus über "Rainer Maria Rilkes Weltbild"* ***mit*** *dem Thema: "Der Dichter und das Wort der Erde"*. (NHG)
On Thursday, November 15th, 5:00 p.m. Elisabeth v. Schmidt-Pauli begins in the university lecture hall 218 her lecture series about "Rainer Maria Rilke's philosophy" **with** the topic: "The poet and the word of the earth".

As stated above, this frame is related to CONTAINMENT via Metaphor. It has been established in the previous chapter that we view books and other literary works as containers, thus the FE Work in this frame correlates to the FE Container in the CONTAINMENT frame. Because literary works contain text about a certain topic, we can then say that the FE Topic correlates to the FE Contents in CONTAINMENT.

[82] I believe the *die* in both this example and example (24) above it refers to *die Predig*. I could not find the full context for these examples, but if I recall correctly the three examples (23), (24), and (25) all appear in the same paragraph.

This usage of *mit* appears only infrequently in the data, as shown in table 5.4 below, though none of the examples are ambiguous.

TOPIC	clear	ambiguous	total
OHG	1	0	1
MHG	0	0	0
ENHG	3	0	3
NHG	3	0	3
total	7	0	7

Table 5.4: TOPIC data

5.1.1.5 TOGETHERNESS

The third frame under discussion which inherits directly from LOCATIVE_CONCOMITANCE is TOGETHERNESS. The frame elements in this frame are Party and Co-Party.[83] The instantiations of both of these FEs range from animals, such as *uuolf* and *lambu* in example (29), to food, such as *Grießschmarren* in example (44), to objects such as *zimberholtz* in example (41); however, the most common instantiation of both of these FEs is people. In this frame, the two frame elements, Party and Co-Party, are located in the same area as one another, thus they have a locative relationship; however, the exact locative relationship (i.e. above, below, near, etc.) is unspecified.

In the examples below, the instantiation of Party is highlighted in teal (light gray if printed in black and white) and the Co-Party is highlighted in purple (dark gray if printed in black and white).

(29) *In dhes chiriihhun ardot uuolf **mit** lambu*... (OHG)
In his church, wolf lives **with** lamb(-Instr)[84]…

(30) *Kot almahtigo, kauuerdomir helfan enti kauuizzida mir ia furistentida ia gaotan uuillun saman **mit** rehten galaupon mir fargepan za dinemo deonoste.* (OHG)
God almighty, permit me to help and grant me wisdom and insight and good will together **with** just beliefs in your service.

[83] Compare FrameNet's ACCOMPANIMENT frame in which the required frame elements are Co-participant and Participant. These labels imply that both factions are performing an action together, whereas Co-Party and Party do not.

[84] The instrumental ending *-u* appears on *lambu* in this example, though the reason for this is unclear. Ehret notes this as an instance of the instrumental case as well, though no explanation is given (Ehret 1907: 9).

(31) *So teta unser trotin, to er an der uuerilte* ***mit*** *menischon uuas ze diu, daz ter fient nihet uerstunde…* (OHG)
Thus our lord acted when he was in the world **with** people, so that the fiend would not understand…

(32) *Tho gieng zi imo thíu muoter thero kindo Zebedéuses* ***mit*** *iro kindon betonti inti bát sihuuaz fon imo.* (OHG)
Then the mother of the children of Zebedia went to him **with** her children begging and asked for something from him.

Example (32) above is ambiguous between TOGETHERNESS and CONCURRENCE due to the fact that *betonti* is a present participle. Thus the CONCURRENCE interpretation of this example would have *thíu muoter thero kindo Zebedéuses gieng zi imo* marked as Occurrence and *iro kindon betonti* as Co-occurrence.

(33) *Inti sie ni forstuontun thaz uuort thaz her sprah zi in, inti nidar stigenti* ***mit*** *in quam zi Nazareth…* (OHG)
And they did not understand the word that he said to them and climbing down **with** them [he] came to Nazareth…

Example (33) above may also have a collaboration reading in which *in* is the Collaborator, *nidar stigenti* the Collaboration, and *her* the Instigator.

(34) *Ovch scriuit uns sente lucas, dat ihc* ***mit*** *marien un Joseppe varende von ihrlem in underdenich was.* (MHG)
Also Saint Lucas writes to us that Jesus, **with** Mary and Joseph, travelling from Jerusalem, was subjugated to them.

(35) *… unde sal nith* ***mit*** *in ezzen an irren dische…* DNI (MHG)
… and [he/she] shall not eat **with** them at their table…

Example (35) above shows an example of definite null instantiation (DNI) of the FE Party,[85] as the word or phrase which fills this FE was most likely mentioned earlier on in the discourse. Additionally, the inflection of the verb *sal* indicates that it is a third person singular noun (hence my insertion of he/she in the translation).

(36) *Wir loven den vader inde den suon* ***bit*** *deme heiligen geiste.* (MHG)
We praise the father and the son **with** the holy spirit.

(37) *Dy lesten woren eyne stunde* ***mit*** *vns.* (MHG)
The last ones were **with** us for an hour.

[85] The reader may recall, DNI stands for definite null instantiation. This means that the frame element marked DNI was most likely instantiated earlier on in the discourse, though the instantiation does not appear in the extracted example. See section 3.3.7 for more detail about CNI, DNI, and INI, specifically example (11) for DNI.

(38) *In der czit gynk ihesus an dem wege* ***myt*** *synen iungern…* (MHG)
At that time, Jesus walked on the path **with** his disciples…

(39) *… da er sprach mit begierd, hab ich begert das Ostermal* ***mit*** *euch zu essen….* (ENHG)
… then he spoke with eagerness, I desired to eat the Easter meal **with** you all…

(40) *Als komend die von basel an su mit macht, dz der von Rechberg* ***mit*** *den sinen die flucht nam…* (ENHG)
As the ones from Basel approach them with might, so that the one from Rechburg **with** those of his fled…

(41) *… nam der wind die tilen gegen dem Rine anhin mit gewalt, warff su* ***mit*** *andrem zimberholtz vber den turn…* (ENHG)
… the wind took the tiles with force toward the Rhine, threw them **with/and** other timber over the tower…

(42) *Jn einer andern darbey / ligend begraben / die edle vnnd Gotsforechtige Roemerin Paula* ***mit*** *jrer Tochter Eustachia…* (ENHG)
In another one nearby, lie buried the noble and devout Roman, Paula, **with** her daughter, Eustachia…

(43) *… ein tieffe verborgne hüle / in dero die Elisabetha sich* ***mit*** *jrem kindlein Johane verwaret…* (ENHG)
… a deep, hidden cave in which Elisabetha stowed herself away **with** her small child Johane…

(44) *Die Grießschmarren entweder* ***mit*** *Kompott oder frischem Salat auftragen.* (NHG)
Serve the dumplings either **with** compote or a fresh salad.

(45) *Nach Tisch holte ich meinen Freund Otto Neumann ab, um* ***mit*** *ihm einen Lindenbummel zu machen…* CNI (NHG)
After the meal I picked up my friend Otto Neumann in order to take a walk **with** him under the lindens… CNI

(46) *… was dem für das Wirtschaftssystem der DDR typischen Wechselspiel von Zentralisation - Dezentralisation und Rezentralisation entspricht und* ***mit*** *einer Verschärfung der Kontrollmechanismen einen neuerlichen Machtzuwachs der zentralen Staatsorgane im ökonomischen Bereich signalisiert.* (NHG)
… which corresponds to the typical–for the economy of the DDR–interplay between centralization, decentralization and recentralization and, **together with** a tightening of the control mechanisms, signals a further power gain of the central government body in the area of economics.

(47) *Daß dieser Mann **mit** seinem jüdischen Anhang seit Jahren mit den gleichen Mitteln gegen Japan kämpft, ist uns bekannt.* (NHG)
That this man **with** his Jewish following has fought for years with the same methods against Japan is known to us.

(48) *Er, **mit** noch ein paar andern, überlebte die Leichen…* (NHG)
He, **with** a few others, survived the corpses…

(49) ***Mit** Willi war nicht nur Lisas Vater gestorben, sondern auch Elkes erster Geliebter.* (NHG)
With Willi, not only did Lisa's father die, but also Elke's first lover.

This frame inherits from LOCATIVE_CONCOMITANCE as two parties, rather than two entities, are located in the vicinity of one another, though the exactness of the locative relationship between the two is (usually) unspecified.[86]
This usage of *mit* is the most frequent across all time periods of the language, with the total instances being 260, as shown in table 5.5 below.

TOGETHERNESS	clear	ambiguous	total
OHG	123	12	135
MHG	44	11	55
ENHG	36	9	45
NHG	24	1	25
total	227	33	260

Table 5.5: TOGETHERNESS data

5.1.1.6 ACCESSORY

Inheriting from TOGETHERNESS is the ACCESSORY frame. The frame elements required to accompany *mit* in order to evoke this frame are Bearer and Accessory. In all cases in the data, the Bearer is instantiated by a living being. The Accessory is most often a physical object, such as *trumbun* or *seinen schuohen* in examples (50) and (57) respectively. However, the Accessory can also be instantiated by an emotion or ability such as *dûgeden* or *mínne* in example (53) or *gnade* in example (55).

[86] One might argue that, due to the generic nature of the relationship between the two parties, this frame and LOCATIVE_CONCOMITANCE may actually be one and the same frame. I have opted to keep them separate in order to have consistency among the mid-level frames, i.e., in order to keep all four mid-level frames non-lexical; however, I am open to revisiting this.

In the examples below, the instantiation of Bearer is highlighted in teal (light gray if printed in black and white) and the Accessory is highlighted in purple (dark gray if printed in black and white).

(50) *Thanne sentit sine engila* ***mit*** *trumbun*... (OHG)
Then [he] sent his angels **with** trumpets…

(51) *Oh fimf dumbo intfanganen liohtfazzon ni namun oli* ***mit*** *in*... (OHG)
But five dumb ones grasping lanterns, none took oil **with** them…

Example (51), along with examples (55), (64), and (65) are noteworthy in the fact that they do not follow the typical pattern that holds in this frame, namely, the noun phrase following *mit* is usually the instantiation of the Accessory, but in these cases, it is the Bearer.

(52) *... sibinzic unta ziuueni iungerun, der er îe ziuueni unte ziuueni fure sante* ***mit*** *sinera predige in îegiliche burch unte stat…* (OHG)
…seventy and two disciples, of whom he then sent forth two and two **with** his sermon to every burg and city…

(53) *Daz dier bizeihchenet den mán, der dir giuuárnôt ist* ***mit*** *allên dûgeden,* ***mit*** *mínne*... (OHG)
The animal symbolizes the man, who is equipped there **with** all virtues, **with** love…

(54) *Ir sizzet in thera burgi, unz ir sit giuuatite* ***mit*** *megine fon hóhi.* (OHG)
You all sit in the burg until you may be attired **with** power from high.

Example (54) above is ambiguous. The two interpretations are ACCESSORY and PROVISION (the latter of which is related to the former via Inchoativity (see section 5.1.1.9). In the PROVISION reading, *megine* is the instantiation of Gift, *ir* the instantiation of Beneficent, and additionally *fon hóhi* would be the instantiation of Benefactor.

(55) *…ein chint daz solt ihc geheizzen werden iz scholt hail un gnade ze siner chumfte aller dirre werlte* ***mit*** *im bringen.* (MHG)
… a child who shall be called Jesus, it shall bring salvation and grace upon its arrival to all the world **with** it.

(56) *An der widiruerte begeginde ime melchisedech* ***mit*** *sime prisante*... (MHG)
On the way back, Melchisedech encountered him **with** his gift…

(57) *Vn̄ sol auch ie der man* ***mit*** *seinen schuohen vnd* ***mit*** *seinen leder sten. an dem freitage vnd an dem samstage auf seiner penke…* (MHG)
And the man shall also always stand **with** his shoes and **with** his leather garment on the Friday and on the Saturday on his bench…

(58) *Ez sol auch nieman sten* ***mit*** *grawen noch* ***mit*** *leinen tuoch ze marckt.* (MHG)
There shall also be no one standing **with** gray nor **with** linen cloth at the market.

(59) *Swer auch lavffet* ***mit*** *verpottener wer verliche zvo ainem criege…* (MHG)
Whoever runs **with** forbidden weapon deceitfully to a war…

(60) *… luffend in die stat* ***mit*** *verhencten messeren…* DNI (ENHG)
… [they] ran into the city **with** hanging knives…

(61) *… vnd santte meister iohan* ***mit*** *hagel vnd tarras buchses zuo nacht….* (ENHG)
… and [s/he] sent Master Johan **with** cannonball and cannon at night…

(62) *… nam er zuo jm seinen spieß /* ***mit*** *eynem starcken vierecketen eisen versehen…* (ENHG)
… he took to him his lance / equipped **with** a strong square iron…

(63) *Es kam der Heyd* ***mit*** *seinem schwerd Plorantz zuo Oliuiern.* (ENHG)
The heathen came **with** his sword, Plorantz, to Oliuiern.

(64) *Getoerste niemand kein messer* ***mit*** *imme dar tragen…* (ENHG)
No one dare take a knife **with** him there…

(65) *Zugleich trugen sie ein Ratsschreiben an den Doktor Theophrastus von Hohenheim* ***mit*** *sich.* (NHG)
At the same time they brought city council to doctor Theophrastus von Hohenheim **with** them.

(66) *… er geht zu seinen Patienten* ***mit*** *schwarzen Handschuhen.* (NHG)
… he goes to his patients **with** black gloves.

(67) *Der* ***mit*** *der Teetasse ergriff das Wort.* (NHG)
The one **with** the teacup chimed in.

Example (67) above is ambiguous due to lack of context. The other reading of this example is the POSSESSION reading. In that case, *der Teetasse* would be the instantiation of Possession and *Der* the instantiation of Possessor. It is unclear in this example whether the person actually possesses the teacup or the teacup is merely located on or around their person.

(68) *… schmale Gräben, 100 Meter vom Feinde ab, in denen wir uns* ***mit*** *Leitern und Handgranaten bereitstellten.* (NHG)
… narrow trenches, 100 meters from the enemy, in which we readied ourselves **with** ladders and hand granades.

Example (68) above is ambiguous between the ACCESSORY reading and the MEANS reading. Under the MEANS interpretation, the instantiation of Means would be *Leitern und Handgranaten* and the instantiation of Action would be *wir stellten uns bereit*.

(69) *In Wirklichkeit landen wir heute* ***mit*** *der gleichen Sicherheit*, ***mit*** *der wir starten und fliegen*. (NHG)
In actuality, we are landing today **with** the same safety **with** which we start and fly.

ACCESSORY is a child frame of TOGETHERNESS, as the FE Bearer corresponds to the FE Party and Accessory corresponds to Co-Party. The Accessory and the Bearer are located not just in the vicinity of one another, but more specifically, the Bearer has the Accessory on their person, usually either carrying or wearing it.

As shown in table 5.6 below, this frame frequently occurs across all time periods.

ACCESSORY	clear	ambiguous	total
OHG	4	3	7
MHG	8	12	20
ENHG	23	5	28
NHG	3	3	6
total	38	23	61

Table 5.6: ACCESSORY data

5.1.1.7 ATTRIBUTE

Inheriting from ACCESSORY is the ATTRIBUTE frame. The frame elements in this frame are Being/Entity and Attribute. Being and Entity make up a core set, meaning only one of these FEs may be instantiated.[87] The FE Being is always instantiated by a living being, such as a person or animal, for example, *sume fon sinen iungoron* and *weißes Pferd* in (70) and (86), respectively. The instantiations of Entity vary a bit more, from concrete objects such as *sabonon* in example (72) and *den manteil* in example (79) to intangible objects such as *der goteliche wîstuom* in example (74) and *dise uigilie* in example (75). Attribute is instantiated by a physical, intellectual, or mental characteristic, which can be either temporary or permanent. Some examples include *unsubren hantun*, *allemo wolewillen,* and *horne* as in examples (70), (74) and (78), respectively.

In the examples below, the instantiations of Entity and Being are highlighted in teal (light gray if printed in black and white) and the instantiations of Attribute are highlighted in purple (dark gray if printed in black and white).

[87] See section 3.3.7 on FrameNet for more detailed information on core sets.

(70) *... inti mittiu see gisahun sume fon sinen iungoron* ***mit*** *unsubren hantun*... (OHG)
… and when they saw some of his disciples **with** unclean hands…

(71) *... inti gisehent mannes sun comentan in himiles uuolkanon* ***mit*** *managemo megine inti mihilnesse*. (OHG)
… and [they] see the son of God coming in the clouds of heaven **with** great power and glory.

(72) *Intfiengun sie tho thes heilantes lichamon inti buntun ínan mit sabonon* ***mit*** *biminzsalbun*... (OHG)
They then received the body of the holy one and bound it with linen clothes **with** herb salve…

(73) *Inti árgieng sín liumunt in alla Syria, inti bráhtun imo alle ubil habante inti* ***mit*** *messalihhen suhtin*... (OHG)
And his reputation went forth into all of Syria, and they brought him all possessed by evil and [all] **with** various sicknesses…

Example (73) above is ambiguous. The other interpretation of this occurrence of *mit* is AFFLICTION. In the AFFLICTION interpretation, *alle* is the instantiation of Experiencer and *messalihher suhtin* the instantiation of Affliction.

(74) *Daz meinet daz da uurstesot diu tiure minna uber al, der goteliche wîstuom,* ***mit*** *allemo wolewillen*. (OHG)
That means that there reigns the worthy love above all, the divine wisdom **with** all goodwill.

Example (74) above can also have a TOGETHERNESS interpretation. In this reading, *der goteliche wîstuom* is the instantiation of Party and *allemo wolewillen* the instantiation of Co-Party. It is unclear contextually in this example whether *allemo wolewillen* is a characteristic of *der goteliche wîstuom* or whether they are separate entities which reign together with the worthy love.

(75) *... so sprih dise uigilie* ***mit*** *den langen leccen*. (MHG)
… then say this prayer **with** the long passages.

Example (75) above is ambiguous and can also have a PARTITIVE reading in which *den langen leccen* instantiates the Profiled_part and *dise uigilie* instantiates the Whole.

(76) *... alse des menschen sun kumyt* ***myt*** *syner macht vnde alle syne engele myt ym.* (MHG)
… so the son of mankind comes **with** his power and all his angels with him.

Example (76) above can also have an ACCESSORY interpretation. In this interpretation, *syner macht* instantiates the FE Accessory and *des menschen sun* instantiates the FE Bearer.

(77) *Er sprichet also: Vrovvve* ***mit*** *diner scone unt* ***mit*** *dinem sconen bilde, so chum vvr unt vvis chuniginne in dem himelriche.* (MHG)
Thus he says: Woman, **with** your beauty and **with** your beautiful image, come forth and be queen in the kingdom of heaven.

(78) ... *uiant unser wir iagen* ***mit*** *horne.* (MHG)
… our fiend **with** horns, we hunt.

(79) *So sal ime der ouferste onf hei da gegenwortihc is ovfe der prister den manteil* ***mit*** *deme cruce geuen.* (MHG)
Thus shall the highest one or he who is present or the priest give him the robe **with** the cross.

Example (79) above can also have a TOGETHERNESS reading in which *den manteil* instantiates the FE Party and *deme cruce* instantiates the FE Co-Party. It is not clear from the context as to whether the priest shall give two separate items, *den manteil* and *deme cruce*, as in the TOGETHERNESS interpretation, or one item, *den manteil*, which has a cross on it, i.e. the ATTRIBUTE interpretation.

(80) *Da zu Neugarten was ain Burger oder Jnwoner* ***mit*** *namen Calvwtza....* (ENHG)
There in Neugarten was a citizen or resident **with** the name of Calvwtza…

(81) … *vnd nam derselbigen schwerdter eyns / , welches* ***mit*** *dem namen hieß Batime…* (ENHG)
… and took one of the same swords, which **by/with** name was called Batime…

(82) … *machtend sich uff den turn* ***mit*** *geschutz.* (ENHG)
… [they] went up the tower **with** weapons.

In example (82) above, it is unclear from context as to whether the people climbed up the tower with a cannon (or similar weapon) in their hands–the Accessory interpretation (in which *geschtuz* would be the instantiation of Accessory, and the Bearer would be DNI, as it was most likely identified in previous discourse) or whether the the cannon is part of the tower and thus a characteristic of the tower.

(83) *Domitte kam ein samlich hagelwetter* ***mit*** *schiblechten steine...* (ENHG)
With that came a complete hailstorm **with** disk-shaped stones…

Example (83) above can also have a PARTITIVE reading in which *schiblechten steine* instantiates the FE Profiled_part and *ein samlich hagelwetter* instantiates the FE Whole.

(84) ... *dz ein fenlin hatte* ***mit*** *der stat jngesihel...* (ENHG)
… that had a small banner **with** the city seal…

(85) *Dort standen ehrwürdige alte Männer* ***mit*** *langen weißen Barten*... (NHG)
There stood dignified old men **with** long white beards…

(86) *Brandschimmel, weißes Pferd* ***mit*** *dunkeln Flecken*. (NHG)
Brandschimmel, white horse **with** dark spots.

(87) *Bronzefiguren der Cola- Zeit, bes. jener anmutig graziöse Typ* ***mit*** *doppelter Biegung der Körperhaltung*... (NHG)
Bronze figures of the Cola-time especially that dainty, graceful type **with** double curvature of the posture…

(88) *Die Toranlage besteht aus 2 vierstöckigen rechteckigen Türmen* ***mit*** *halbrunder Außenfront* (NHG)
The gate-complex is made of 2 four-story rectangular towers **with** semi-circular façade…

(89) *In Gebieten* ***mit*** *langem und warmem Herbst kann Zuckermais bis Anfang Juli ausgesät werden.* (NHG)
In regions **with** a long and warm autumn, sweetcorn can be sown until the beginning of July.

This frame is a child frame of ACCESSORY. The frame elements from the parent frame, Bearer and Accessory, correspond to Being/Entity and Attribute, respectively. The FE Attribute, rather than being a (usually physical) object that a living being has on their person, is a characteristic of the Being or Entity. This Attribute can be seen as having an even closer relationship with the being, as it is a physical or mental part of the Being or Entity which cannot be separated from it, unlike Accessory in the ACCESSORY frame.

This frame is evoked frequently across all periods of time in the data as shown in table 5.7 below.

ATTRIBUTE	clear	ambiguous	total
OHG	3	4	7
MHG	7	17	24
ENHG	10	13	23
NHG	31	13	44
total	51	47	98

Table 5.7: ATTRIBUTE data

5.1.1.8 PARTITIVE

Also inheriting from ACCESSORY is the PARTITIVE frame. The frame elements required to occur along with *mit* are Whole and Profiled_part. The instantiations of both the FEs Whole and Profiled_part are mostly abstract entities such as *dise uigilie*, *begrenzte Selbstverwaltungsrechte*, and *das I. Korps* in examples (90), (93) and (95), respectively. Sometimes it is the case that the instantiation of Whole is a physical manifestation, such as *ein samlich hagelwetter* in example (91) and *südchinesischen Binnenland* in example (96); however, it is never a tangible object. Profiled_part, on the other hand, may be instantiated by a tangible object, such as *schiblechten steine* and *einer kleinen Universität* in examples (91) and (93), respectively.

In the examples below, the instantiations of Whole are highlighted in teal (light gray if printed in black and white) and the instantiations of Profiled_part are highlighted in purple (dark gray if printed in black and white).

(90) *... so sprih dise uigilie **mit** den langen leccen.* (MHG)
… then say this prayer **with** the long passages.

Example (90) above is ambiguous and can also have an ATTRIBUTE reading in which *den langen leccen* instantiates the Attribute and *dise uigilie* instantiates the Entity.[88]

(91) *Domitte kam ein samlich hagelwetter **mit** schiblechten steine...* (ENHG)
With that came a complete hailstorm **with** disk-shaped stones…

Example (91) above can also have an ATTRIBUTE interpretation in which *schiblechten steine* instantiates the FE Attribute and *ein samlich hagelwetter* instantiates the FE Entity.[89]

(92) *Dann in der nacht kamen offtmals grosse donnerwetter **mit** regen vnnd windt...* (ENHG)
Then, at night, often came great thunderstorms **with** rain and wind…

Just like examples (90) and (91) above, example (92) may also be interpreted as having an ATTRIBUTE reading in which *regen vnnd windt* instantiates the FE Attribute and *grosse donnerwtter* instantiates the FE Entity.

(93) *Die Kap-Mischlinge haben zwar, ähnlich wie die Inder in Durban, begrenzte Selbstverwaltungsrechte, **mit** eigenen Schulen, auch **mit** einer kleinen Universität...* (NHG)
The cape-mixed people have indeed, similar to the Indians in Durban, limited self-governing rights, **including** their own schools, also **including** a small university…

[88] This example is also listed as example (75) in the discussion of the ATTRIBUTE frame (see section 5.1.1.7).
[89] This example is also listed as example (83) in the discussion of the ATTRIBUTE frame (see section 5.1.1.7).

(94) *Maßnahmen traten am 1.6.1984 in Kraft: u.a. Verlängerung des bezahlten Babyjahrs auf 18 Monate vom 3. Kind an; bezahlte Freistellung zur Pflege erkrankter Kinder; vorrangige Versorgung* ***mit*** *größeren Wohnungen*. (NHG)
Measures became effective on 6/1/1984: among others, extension of paid parental leave for 18 months for the third child onward; paid leave for care of sick children; priority accommodation **with** larger dwellings.

(95) *Bei ihr sind bisher 6 Divisionen, die in 3 Korps gegliedert sind, und zwar am Ostflügel das I. Korps (General Santini)* ***mit*** *den Heeresdivisionen 19 und 30 bei Adigrat*... (NHG)
Among it are thus far 6 divisions, which are divided into 3 corps, namely on the east flank the first corps (General Santini) **with** the army divisions 19 and 30 near Adigrat…

(96) *... im Süden wurden südlich von Ch'u neue Kommanderien errichtet, drei zum Beispiel 214 v. Chr. im südchinesischen Binnenland -* ***mit*** *Teilen der heutigen Provinz Hunan, Kuangtung und Kuangsi*... (NHG)
… in the south, new commanders were established, three, for example, in 214 BC in the southern Chinese interior–**including** parts of the present-day provinces Hunan, Kuangtung, and Kuangsi…

This frame is a child frame of ACCESSORY for the following reasons. The frame element Whole in this frame corresponds to the FE Bearer and Profiled_part corresponds to Accessory. Profiled_part is a component of the Whole, whereas Accessory is an object which is carried or held on the body by the Bearer. The relationship between the two FEs in this frame is even closer, as the Profiled_part may not easily be separated from the Whole in this frame, but the Accessory may easily be separated from the Bearer in the ACCESSORY frame.

As shown in table 5.8 below, this frame is only evoked once in MHG (and is ambiguous), twice in the ENHG (also both ambiguous) and four times in the NHG time period (all of which are unambiguous). This may indicate–and I state this rather cautiously because, again, this study is not exhaustive–that the PARTITIVE interpretation may be a newer meaning of *mit*, potentially only entering into Traugott and Dasher's Stage II (coded) meaning in the NHG time period.

PARTITIVE	**clear**	**ambiguous**	**total**
OHG	0	0	0
MHG	0	1	1
ENHG	0	2	2
NHG	4	0	4
total	4	3	7

Table 5.8: PARTITIVE data

5.1.1.9 POSSESSION

Inheriting from ATTRIBUTE is POSSESSION. The frame elements required to be instantiated and appear alongside *mit* are Possessor and Possession. The FE Possessor is always instantiated by a living being. Possession, however, may be a tangible object, such as *sein ainer hant* or *der Teetasse* in examples (98) and (103), respectively; an intangible object, such as *sechs Wochen Frist* or *dem Leben* in (99) and (101), respectively; or an emotion, such as *Haß* in example (100).

In the examples below, the instantiations of Possessor are highlighted in teal (light gray if printed in black and white) and instantiations of Possession are highlighted in purple (dark gray if printed in black and white).

(97) *Inti árgieng sín liumunt in alla Syria, inti bráhtun imo alle ubil habante inti* ***mít*** *messalihhen suhtin…* (OHG)
And his reputation went forth into all of Syria, and [they] brought him all possessing evil and [all] **with** various sicknesses…

Example (97) above may also have an AFFLICTION interpretation in which *alle* instantiates the FE Experiencer and *messalihhen suhtin* instantiates the FE Affliction.

(98) *Do er vmb angesprochen wirt vnd vmb inziht* ***mit*** *sein ainer hant enbresten mag.* (MHG)
So he is addressed about it and concerning the charge may go free **with** his one hand.

(99) *… im allgemeinen können beide Teile* ***mit*** *sechs Wochen Frist auf den Schluß des Kalendervierteljahres kündigen…* (NHG)
… generally both parts can resign **with/having** six weeks reprieve at the end of the calendar quarter year…

(100) ***Mit*** *Haß auf Franz ist sie gestorben…* (NHG)
With hate for Franz, she died…

Example (100) above may also carry a CONCURRENCE interpretation. If we elucidate the meaning of the sentence by transforming the grammar, we could say *sie ist gestorben und sie hasst Franz immer noch/bis zum Ende ihres Lebens.* This would clarify the CONCURRENCE interpretation and show the instantiations of the FEs belonging to that frame as follows. *Sie ist gestorben* instantiates the FE Occurrence and *sie hasst Franz* instantiates the FE Co-occurrence, though in this case it would be the combination of the aforementioned instantiations and the conjunction *und* (rather than the preposition *mit*) that would evoke the frame.

(101) *Er kam* ***mit*** *dem Leben davon…* (NHG)
He survived (lit: came out of it **with** his life).

(102) ***Mit*** *rund 1,9 Millionen Kunden liegt man weit vor der Konkurrenz.* (NHG)
With/possessing about 1.9 million customers one is far ahead of the competition.

Example (102) above is contextually ambiguous and may also have a reading of CAUSE, in which case *rund 1,9 Millionen Kunden* instantiates the FE Cause and *man liegt weit vor der Konkurrenz* instantiates the FE Effect.

(103) *Der* ***mit*** *der Teetasse ergriff das Wort.* (NHG)
The one **with** the teacup chimed in.

As stated with regard to this example in the ACCESSORY frame, example (103) above is ambiguous (due to lack of context) with the other reading of this example being ACCESSORY. In that case, *der Teetasse* would be the instantiation of Accessory and *Der* the instantiation of Bearer. It is unclear in this example whether the person actually possesses the teacup or the teacup is just temporarily on or around their person.[90]

This frame is a child frame of ATTRIBUTE as the two FEs in this frame hold a more specific relationship to one another, i.e., a relationship of possession in which one party, the Possessor, owns or has in their possession an object, the Possession.. The FE Possessor in this frame correlates with the core set Being and Entity and the FE Possession correlates with Attribute.

As shown in table 5.9 below, this frame occurs only once in the OHG data (and is ambiguous), once (unambiguously) in the MHG data, not at all in the ENHG data, and five times in the NHG data, three examples of which are ambiguous.

POSSESSION	clear	ambiguous	total
OHG	0	1	1
MHG	1	0	1
ENHG	0	0	0
NHG	2	3	5
total	3	4	7

Table 5.9: POSSESSION data

5.1.1.10 PROVISION

Related to POSSESSION via Inchoativity[91] (i.e., actions performed in this frame result in the relationship between the frame elements in the POSSESSION frame) is PROVISION. The frame elements required to accompany *mit* in order to evoke this frame are Beneficent, Gift, and

[90] This example also appears as example (67) in the discussion of the Accessory frame in section 5.1.1.6.

[91] This is essentially the same as the Inchoative_of frame-to-frame relationship used in FrameNet. Ruppenhofer et al. touch upon this very briefly in *Extended Theory and Practice* (Ruppenhofer et al. 2016: 77–78).

Benefactor. The FE Beneficent is always instantiated as a living being (or a place which stands metonymically for its people, such as *diu burg* in example (104)) with the exception of example (110) in which the Beneficent is instantiated by the NHG *dieses Wort*. The FE Gift is usually instantiated by something honorable, desired, or precious, such as*, khetten / Tringkhgeschieren vnnd annderm,* or *Gold / Silber vnd Edelgestein* in examples, (107), and (109), respectively. The FE Benefactor, when it is actually instantiated, is filled by a living being, such as *des Khaisers brueder Ertzhertzog Ferdinanden* and *Der Fürst* in examples (108) and (111), respectively. This FE, however, is often left uninstantiated in the data under examination, due to the fact that many of these sentences are formed using the passive voice, thus marked as CNI (constructional null instantiation). This means that the doer of the action is not instantiated due to the grammatical constraints of the, in this case passive, construction.[92]

In the examples below, the instantiations of Beneficient are highlighted in teal with white text (medium gray if printed in black and white), instantiations of Gift are highlighted in purple with white text (dark gray if printed in black and white), and instantiations of Benefactor are highlighted in light gray with black text.

(104) *Diu burg ist gestiftet* ***mit*** *aller tiuride meist ediler geistgimmon, der himelmeregriezzon.* CNI (OHG)
The burg is endowed **with** all splendor especially of excellent gems, of the divine pearls. CNI

(105) *Ir sizzet in thera burgi, unz ir sit giuuatite* ***mit*** *megine fon hóhi.* (OHG)
You all sit in the burg until you are attired **with** power from highness.

Example (105) above is ambiguous, the two interpretations being ACCESSORY and PROVISION. In the ACCESSORY reading, *megine* is the instantiation of Accessory and *ir* the instantiation of Bearer.

(106) *Der da gesegenet si* ***mit*** *der gewonlicher senungen*... CNI (MHG)
He there may be blessed **with** the common desire… CNI

The Benefactor is marked as CNI (constructional null instantiation) in example (106) above because this is a passive sentence in which the agent of the action is not instantiated.[93]

(107) *Die Potschafften / so zu Khaiser vnnd Khuenigen geschigkht / vnd dieselben* ***mit*** *khetten / Tringkhgeschieren vnnd annderm verehrt worden…* CNI (ENHG)
The messages thus sent to the kaiser and the queen, and they were honored **with** necklaces, drinking vessels and other things… CNI

[92] See section 3.3.7 on FrameNet annotation practices for further details on CNI, DNI, and INI.
[93] Again, see section 3.3.7 for more detail about CNI, DNI, and INI.

(108) …*daſelbſtn* ***mit*** *anſehlichen khetten Hiſpaniſchen Topplgůlden darnach. auch von des Khaisers brueder Ertzhertzog Ferdinanden, meinem herrn /* ***mit*** *silbren vergueltten Khoepfen / auch gülden vnd silbren stugkhen / Osterreichischer silbrer vnd gueldener müntz begabt vnnd verehrt worden.* (ENHG)
… the same ones were honored and gifted **with** handsome necklaces of double guilder, afterward also [honored and gifted] **with** silver golden drinking vessels, also golden and silver pieces of Austrian silver and golden coins by the brother of the kaiser, Ferdinand, my lord.

(109) *... daß er werde seinen Gott Mauzzim ehren /* ***mit*** *Gold / Silber vnd. Edelgestein...* (ENHG)
… that he will honor his God, Mauzzim, **with** gold, silver, and precious gemstone…

(110) *Um dieses Wort wenigstens* ***mit*** *einer deutschen Übersetzung zu versehen....* CNI (NHG)
In order to provide this word at least **with** one German translation… CNI

(111) *Der Fürst ... gab eine der höchsten Stellen des Landes unter seine Verwaltung und überhäufte ihn* ***mit*** *Ehren und Auszeichnungen.* (NHG)
The ruler … gave one of the highest positions of the country under his administration and lavished him **with** honors an accolades.

(112) *Zum 65. Geburtstag wurde er* ***mit*** *der Fs. Aspekte der Neuen Musik... geehrt.* CNI (NHG)
For his 65th birthday, he was honored **with** the festschrift Aspects of New Music. CNI

(113) *Unter Berufung auf sozialistische Tradition wurde das private Sortiment weitgehend ersetzt durch den »Volksbuchhandel« zur »Versorgung der Bevölkerung* ***mit*** *fortschrittlicher Literatur«.* CNI (NHG)
With reference to socialist tradition, the private range of products was largely replaced by the "public book trade" for the "provision of the populace **with** advanced literature". CNI

As stated above, the relation between this frame and POSSESSION is a relationship of Inchoativity. This means that the actions that are performed in this frame, namely those of providing people with some kind of desirable object, result in the the Possessor-Possession relationship in the POSSESSION frame. Thus the frame element Beneficent in this frame correlates to Possessor in the POSSESSION frame and the FE Gift correlates to Possession. Benefactor, however, does not have a corresponding FE in the POSSESSION frame (nor is it required to have one in this frame-to-frame relationship).

This frame occurs in all time periods under investigation, though with little frequency in each period, as shown in table 5.10 below.

PROVISION	clear	ambiguous	total
OHG	1	1	2
MHG	1	0	1
ENHG	3	1	4
NHG	4	0	4
total	9	2	11

Table 5.10: PROVISION data

5.1.1.11 AFFLICTION

Inheriting from POSSESSION with a negative perspective is the AFFLICTION frame. The frame elements in this frame which are required to occur along with *mit* are Experiencer and Affliction. In all of the examples found in the data, with the exception of the one NHG example, the FE Experiencer is instantiated by a living being, while the FE Affliction is, in all cases, instantiated by a negative state, emotion, or task such as *des tiufalis uuerhi*, *sichtuome,* and *negativer Erinnerung* in examples (114), (118), and (124), respectively.

In the examples below, the instantiations of Experiencer are highlighted in teal (light gray if printed in black and white) and instantiations of Affliction are highlighted in purple (dark gray if printed in black and white).

(114) ... *die luginare, die diûbe, die sint piheftit* ***mit*** *des tiufalis uuerhi*. (OHG)
… the liars, the thieves, they are burdened **with** the work of the devil.

(115) ... *bithiu ir ladet man* ***mit*** *lesti thia sie fortragan ni mugun*... (OHG)
… because you all load men **with** burdens which they cannot endure…

Example (115) above may also be interpreted as having a CONTAINMENT reading in which *man* is the Container and *lesti thia sie fortragen ni mugun* is the Contents.[94]

(116) *After thiu* ***mit*** *riuuu giruorit fuor thara.* CNI (OHG)
After that, touched **with** regret, [s/he] went there.

(117) *Inti árgieng sín liumunt in alla Syria, inti bráhtun imo alle ubil habante inti* ***mit*** *messalihhen suhtin*... (OHG)
And his reputation went forth into all of Syria, and [they] brought him all possessing evil and [all] **with** various sicknesses…

[94] This example also appears as example (8) in the discussion of the CONTAINMENT frame in section 5.1.1.3.

Example (117) above may also have a POSSESSION interpretation in which *alle* instantiates the FE Possessor and *messalihhen suhtin* instantiates the FE Possession.[95]

(118) *Der minnor saltr ist den gemachet, di in uertn sint oder in den scefen oder beuangen sint **mit** sichtuome oder **mit** ummuoze…* (MHG)
The minor psalter is made for those who are in route or in the ships
or are afflicted **with** disease or **with** unease…

(119) *… da mide hei die bedruofden undersezzen sal unde gesterken die da crankes muodes sint unde **mit** truorecheite zerbrochen…* (MHG)
… so that he shall support the sorrowful and strengthen those who are
sick of mind and broken **with** sadness.

Example (119) above also carries an AGENTIVE interpretation in which *truorecheite* instantiates the FE Agent and *die da sint zerbrochen* instantiates the FE Action.

(120) *Vir Razel hadde clare ougen inde sach cleirlichen want si **mit** niethe bekumbert in was.* (MHG)
Miss Razel had clear eyes and saw clearly because she was burdened
with/by nothing.

(121) *Dy suche hatten von manchir hande suche vnde **myt** pynen begriffen…* (MHG)
Those who had disease of many a sickness and [were] afflicted
with/by pains…

(122) *Der qam **mt** einer suothe die bestunt die lute vme die hegedruose.* (MHG)
He came **with** a disease which afflicted the people on the gonad.

(123) *Keyser Carle was **mit** hefftigen gedaencken beladen…* (ENHG)
Kaiser Carle was burdened **with/by** heavy thoughts…

(124) *Auch deshalb kritisiert Eberhard Diepgen das Holocaust-Denkmal; es belastet seine heile Welt **mit** negativer Erinnerung…* (NHG)
Also because of that, Eberhard Diepgen criticizes the Holocaust memorial;
it burdens his ideal world **with** negative memory…

This frame relates to POSSESSION via both inheritance and the metaphor EMOTIONS ARE OBJECTS.[96] Applying this metaphor to the FEs of the POSSESSION frame, the source is Possession (which is a type of object) and the target is Emotion. Additionally, in the AFFLICTION frame, the Emotion is specified to be a negative emotion (or state), thus the frame is labeled as having a negative perspective and the FE is labeled as Affliction. The FE Experiencer then corresponds to Possessor.

[95] This example also appears as example (97) in the discussion of the POSSESSION frame (see section 5.1.1.9).
[96] MetaNet (https://metaphor.icsi.berkeley.edu/pub/en/index.php/Metaphor:EMOTIONS_ARE_OBJECTS)

This usage occurs across all time periods of the language. Though it only appeares once in the NHG data, it is still alive and well, as attested by the NHG phrases such as *belasten mit* ('to burden with') and *(sich) plagen mit* ('to bother/annoy/afflict with').

AFFLICTION	clear	ambiguous	total
OHG	2	2	4
MHG	5	1	6
ENHG	1	0	1
NHG	1	0	1
total	9	3	12

Table 5.11: AFFLICTION data

5.1.1.12 AMALGAMATION

Relating to TOGETHERNESS via Inchoativity is AMALGAMATION. The frame elements in this frame are Addition and Mixer. The FE Addition is often a pronoun which represents either a person or a food item. Most of the occurrences of this frame in the data are either about people integrating themselves with others or about cooking. In both cases, however, one entity is being incorporated into another entity, forming an unstated Whole. Examples of instantiations of Addition are *dhea nidhigun, gimirrotan uuin,* and *Daimler-Benz* as shown in examples (125), (126), and (136) respectively. Instantiations of Mixer are *sundigem, gallun,* and *Messerschmitt-Bölkow-Blohm (MBB)* in the same examples.

In the examples below, the instantiations of Addition are highlighted in teal (light gray if printed in black and white) and instantiations of Mixer are highlighted in purple (dark gray if printed in black and white).

(125) *In dhes æuuiste »sitzit pardus mit gheizssinu«, bauhnit dhea nidhigun chimenghide* ***mit*** *sundigem*. (OHG)
In this sheep-pen "sits panther with baby goat", means the jealous ones mixing **with** sinners.

(126) *... gabun imo gimirrotan uuin trinkan* ***mit*** *gallun gimisgitan…* (OHG)
… [they] gave him myrrh wine mixed **with** bile to drink…

(127) *... vnd nim ein wenig anis vnd mal daz* ***mit*** *ezzige vnd* ***mit*** *honicsaume...* (MHG)
… and take a little anise and grind that **with** vinegar and **with** virgin honey…

(128) *Nim wintruebele vnd stoz sur ephele, diz tuo zvosammene, menge ez* ***mit*** *wine vnd drueck es vz.* (MHG)
Take grapes and beat sour apples, these two together. Mix it **with** wine and reduce it.

(129) *... vnd menge daz* ***mit*** *der milich vnd* ***mit*** *den totern vnd saffran tuo dar zvo.* (MHG)
… and mix that **with** the milk and **with** the yolks and add saffron.

(130) *... nim eyger vnd zeslahe die* ***mit*** *semelmele.* (MHG)
… take eggs and whip them **with** breadcrumbs.

(131) *... vnd ruere die abe* ***mit*** *eime zuckere vnd schuet daz vf ein touch.* (MHG)
… and stir them up **with** a sugar and shake that onto a towel.

(132) *Sein heyllige prust lassen durchstechen, aufdas er sych in sy czug vnd gancz* ***mit*** *im verainiget.* (ENHG)
His holy breast pierced, so that he drew into it and united himself **with** him completely.

(133) *... obwoln er schon* ***mit*** *den Ketzern vnnd vnglaubigen Voelckern vnterspickt vnnd vermischt ist.* (ENHG)
… although he is already mingled and mixed **with** the heretics and the unbelieving peoples.

(134) *Vnd nachdem du dich* ***mit*** *vnserem armen flaisch vnd bluot verainiget…* (ENHG)
And after you united yourself **with** our poor flesh and blood…

(135) *Daß im übrigen die Erforschung von Idealvorstellungen nicht* ***mit*** *der Setzung einer politisch relevanten Versorgungsnorm verwechselt werden darf, sei hier nur am Rande vermerkt.* (NHG)
That, furthermore, the investigation of the ideals may not be conflated **with** the positing of a politically relevant provisions-norm, is only a sidenote.

(136) *Der letzte Akt im Spektakel um die Fusion von Daimler-Benz* ***mit*** *Messerschmitt-Bölkow-Blohm (MBB) war zugleich der langweiligste.* (NHG)
The last act in the spectacle around the fusion of Daimler-Benz **with** Messerschmitt-Bölkow-Blohn (MBB) was, at the same time, the most boring.

(137) *Dieses* ***mit*** *Mayonnaise anrühren…* (NHG)
Stir this **with** mayonnaise …

This frame relates to TOGETHERNESS via Inchoativity as the action of mixing two or more entities or persons together results in the two entities or people being connected to form one element or one relationship (a Whole). The FE Addition corresponds to the FE Party in the TOGETHERNESS frame and the FE Mixer corresponds to the FE Co-party.

As shown in table 5.12 below, this frame occurs across all time periods, though not with much frequency in OHG, ENHG, or NHG. It occurs most often in the MHG period due to the fact that

the MHG corpus contained a book of recipes. Interestingly, as is the case with the CONNECTION frame, no occurrences of this frame were ambiguous.

AMALGAMATION	clear	ambiguous	total
OHG	2	0	2
MHG	37	0	37
ENHG	3	0	3
NHG	3	0	3
total	45	0	45

Table 5.12: AMALGAMATION data

5.1.1.13 CONNECTION

Inheriting from AMALGAMATION is CONNECTION. The frame elements which must occur with *mit* in order to evoke this frame are Party 1 and Party 2. Additionally, an optional frame element, Relationship, may occur, but is not required. This optional frame element is instantiated by connections between two parties, such as *gesellschaft* in example (138), *Ähnlichkeit* in example (141), and *die Analogie* in example (142). In the earlier time periods of MHG and ENHG, the instantiations of both Party 1 and Party 2 are living beings and Relationship is instantiated in the examples; however, there is only one example each that occurs in the MHG and the ENHG time period. In the NHG time period, on the other hand, Party 1 and Party 2 may be institutions which stand metonymically for the people that make up the institutions, suchs as *unsere ganze DDR* instantiating Party1 in example (141) and *dem chemischen magisterium* instantiating Party 2 in example (142). The NHG examples also include the verb phrase *mit etwas zusammenhängen* (examples (140) and (143)), which has a very generic meaning of 'to be related/connected to; to be associated with'.

In the examples below, the instantiations of Party 1 are highlighted in teal with white text (medium gray if printed in black and white) and instantiations of Party 2 are highlighted in purple with white text (dark gray if printed in black and white). When it is instantiated, Relationship is highlighted in light gray with black text.

(138) ... *noch sol auch kain geselleschaft haben* ***mit*** *den der ez von dem lande treibet*.DNI (MHG)
… [s/he] shall also not keep company **with** the one who drives it from the country.

(139) ... *vnd* ***mit*** *jhnen allen die wenigste gmeinschafft hat*... DNI (ENHG)
… and **with** them all [s/he] has the least gemeinschaft.

(140) *Ferner gibt es eine große Wissenschaft der Verhältnislehre, die eng* ***mit*** *der Eidologie zusammenhängt.* (NHG)
Furthermore, there is a large science of theory of proportions, which is closely related **to** eidology.

(141) *Wenn nun unsere ganze DDR Ähnlichkeit* ***mit*** *meinem schönen BMW [hat]…* (NHG)
If only our whole GDR had a resemblance **to** my beautiful BMW…

(142) *Zwar fällt die Analogie des katholischen officium divinum* ***mit*** *dem chemischen magisterium ins Auge…* (NHG)
Indeed the analogy of the catholic officium divinum **to** the chemical magisterium caught [our] eye...

(143) *Das hängt nun alles* ***mit*** *dem Blutkreislauf zusammen.* (NHG)
All of it has to do **with** circulation.

(144) *Er ist auch am engsten verwandt* ***mit*** *der ursprünglichen Form des Tiefdrucks, dem Kupferstich.* (NHG)
It is also most closely related **to** the original form of intaglio, the copperplate print.

This frame inherits from AMALGAMATION as Party 1 correlates to Addition, Party 2 to Mixer, and Relationship to Whole.

This frame occurs only once in the MHG data, once in the ENHG data and never in the OHG data. It appears more frequently in the NHG data, as shown in table 5.13. Interestingly, none of the 31 occurrences of this frame are ambiguous.[97]

CONNECTION	clear	ambiguous	total
OHG	0	0	0
MHG	1	0	1
ENHG	1	0	1
NHG	28	1	29
total	30	1	31

Table 5.13: CONNECTION data

[97] The one example that is marked as ambiguous in the NHG time period is actually an instance in which *mit* is used only once but two frame elements from two distinct frames are instantiated. See example (217) in section 5.1.3.3.

5.1.2 TEMPORAL_CONCOMITANCE

The TEMPORAL_CONCOMITANCE frame involves two general events which hold a generic temporal relationship with one another, such as in the English sentence *She sang while driving*.[98] In this sentence, the two events of singing and driving are occurring at simultaneously. These two events make up the two frame elements Event 1 and Event 2. The FEs Event 1 and Event 2 correlate to Occurrence 1 and Occurrence 2 of the parent frame CONCOMITANCE.

The frames in this section all stem from this non-lexical, mid-level frame–though only one frame, CONCURRENCE, inherits directly from it. The other frame in this section inherits from CONCURRENCE and is called CIRCUMSTANCE. These relationships are depicted in figure 5.2 below.

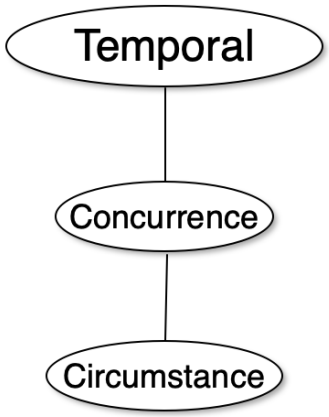


Figure 5.2: Frame relations under TEMPORAL_CONCOMITANCE

In the following subsections, the two frames stemming from TEMPORAL_CONCOMITANCE and their relationships to each other are discussed.

5.1.2.1 CONCURRENCE

The first frame under discussion in this section inherits directly from TEMPORAL_CONCOMITANCE. The frame elements are Co-occurrence and Occurrence. In all instances of this frame, the FE Occurrence is instantiated by an event or action in the form of a verb phrase, such as *thisu sprah ih iu*, *uuir sterben*, and *er ging in die Cappel* in examples (145), (147), and (158). Co-occurrence, on the other hand, may manifest in the form of an eventive verb phrase, such as *iu uuonenti* in example (145), but most often it occurs as either an eventive noun phrase, such as *diebstall* in examples (155) and (156) or a noun phrase that implies action, such as *diesen Worten* in examples (158), (159), and (160). Additionally, in ambiguous cases, Co-occurrence may be instantiated by a living being, as in examples (148), (149), (153), among

[98] Again, I am not claiming here that the English conjunction *while* evokes the TEMPORAL_CONCOMITANCE frame, as a more rigorous study would need to be conducted. This is merely to give the reader a sense of this frame.

others, or by a temporal phrase such as *dem 13. Jh.* or *15 Jahren* in examples (161) and (163), respectively.

In the examples below, the Occurence is highlighted in teal (light gray if printed in black and white) and the Co-occurrence is highlighted in purple (dark gray if printed in black and white).

(145) *Thisu sprah ih íu* ***mit*** *iu uuonenti*. (OHG)
I said these to you all **while** you live (lit: **with** you all living-PresPart).

(146) *Ibu huuaz ist kepotan, nalles stozzonto, nalles uualo, nalles trago edo* ***mit*** *murmulode edo* ***mit*** *antuurtu des ni uuellentin ist kitan*... (OHG)
If something is ordered, [it] is done in no way hesitantly, in no way half-heartedly, in no way carelessly or **with** complaining or **with** answer of not wanting to…

Example (146) above may also have a MANNER interpretation in which *ist kitan* instantiates the FE Action and *murmulode* and *antuurtu des ni uuellentin* instantiate the FE Manner.

(147) *Gemes uuir, thaz uuir sterben* ***mit*** *imo*. (OHG)
Let us go, so that we die **with** him.

Example (147) above is ambiguous in meaning between the following interpretations. First, the CONCURRENCE reading is that *we die at the same time as he dies*. The FEs are marked above for this interpretations. The second reading is TOGETHERNESS in which *we are in the same location as he is when we die*. In the latter reading, *uuir* instantiates the FE Party and *imo* the FE Co-party.

(148) *Zisperi oba mir gilimphit* ***mit*** *dir zi sterbanne, thanne ni forlougnu thin.* (OHG)
Certainly, if [it] befits me to die **with** you, then I do not deny you.

Example (148) above is also ambiguous between the two readings CONCURRENCE and TOGETHERNESS. The CONCURRENCE reading is that *I die at the same time as you*. The TOGETHERNESS reading indicates that *I am in the same place as you when I die.* In this case, *mir* instantiates Party and *dir* Co-party.

(149) *Tho uuarun erhangan* ***mit*** *imo zuene thioba*... (OHG)
There, two thieves were hung **with** him…

Example (149) above shows the same ambiguous interpretability as examples (148) and (149) in that there is a CONCURRENCE reading and a TOGETHERNESS reading. Again, the CONCURRENCE reading is that *two thieves were hung at the same time he was hung* and the TOGETHERNESS interpretation is that *two thieves were in the same place as he was when they were hung*. In the latter example, the FE Party is instantiated by *zuene thioba* and Co-party is instantiated by *imo.*

(150) *Do gebot sente gregorius, vber alle die werlt daz man disen tach beginge* **mt** *vastene vnd* **mt** *cruocegange*... (MHG)
Then Saint Gregorius ordered that across the world one should celebrate this day **with** fasting and **with** procession…

Example (150) above also has a MEANS reading in which *vastene* and *cruocegange* instantiate the frame element Means and *man disen tach beginge* instantiates the frame element Action.

(151) ... *un wie hei sei suele intphain* ***mit*** *dem seningin in den schierme der ecclesien.* (MHG)
… and how he should receive them **with** the blessing in the protection of the church.

Example (151) above shows ambiguity between CONCURRENCE and MEANS. The CONCURRENCE reading is that *he should receive them and perform the sign of the cross at the same time*. The MEANS reading, on the other hand, is that *he should receive them by means of performing the sign of the cross*. In the latter case, *hei sei suele intphanin* instantiates the FE Action and *dem seningin* instantiates the FE Means.

(152) *Swer aber den wirt oder sein wirtein oder ain ir kint haimsuocht daz er die vebele handelt in ir hause* ***mit*** *royfenne oder* ***mit*** *schlahenne oder* ***mit*** *verwnden*... (MHG)
Though whoever taunts the landlord or landlady or one of their children, so that he mistreats them in their house **with** calling or **with** beating or **with** injuring…

Example (152) above is also ambiguous between a CONCURRENCE reading and a MEANS reading. In the CONCURRENCE interpretation, *he mistreats them in their house and performs the activities calling, beating, and injuring at the same time*. In the MEANS interpretation, *he practices evil in their house by means of performing the actions of calling, beating, and injuring*. In the latter reading, the FE Action is instantiated by *er die vubele handelt in ir hause* and the FE Means by *royfenne, schlahenne,* and *verwnden.*

(153) *Die andere stervent alle* ***mit*** *uns*... (MHG)
The others all die **with** us…

Example (153) above is another example of ambiguity between CONCURRENCE and TOGETHERNESS. In the CONCURRENCE interpretation, *the others all die at the same time we die*, but in the TOGETHERNESS reading *the others are all in the same place as we are when they die.* In the latter interpretation, the FE Party is instantiated by *die andere* and Co-party by *uns.*

(154) ... *want man* ***mit*** *deme cruce den abeit disses ordenes enphehet.* (MHG)
… because one receives **with** the sign of the cross the habit of this order.

Like example (152), example (154) above also has a MEANS interpretation. In the CONCURRENCE interpretation, *one receives the habit of this order at the same time they receive the sign of the*

cross. In the MEANS interpretation, on the other hand, *one receives the habit of this order by means of receiving the sign of the cross.* In the latter interpretation, the FE Action is instantiated by *man enphehet den abeit disses ordenes* and *deme curce* instantiates the FE Means.

(155) *Wo aber deren ainer **mit** Diebstall / Trungkhenhait oder andern weltlichen vnschickligkhaitn betretten wirdt*... (ENHG)
Though where one of them is caught **committing** (lit: **with**) theft, drunkenness or other worldly improprieties…

(156) *Vor wenig Jaren hat des groeßfuersten Statthalter ainen briester **mit** diebstall betretten*... (ENHG)
A few years ago, the stadtholder of the Grand Duke caught a priest **committing** (lit: **with**) theft.

(157) ***Mit** denen worten / liessen sie jre pferd zusamen lauffen*... (ENHG)
With those words, they let their horses run together…

(158) ***Mit** diesen worten ging er, sein antlitz mit seinem mantel bedeckent, in die Cappel*... (ENHG)
With these words he went into the chapel, covering his face with his coat…

(159) *Vnd **mit** diesen worten zeychnet er sich mit seinem schwerdt / mit dem zeychen des heyligen Creutzes*... (ENHG)
And **with** these words, he signs himself with his sword, with the sign of the holy cross…

(160) … ***mit** diesen Worten wendet sich Sancho an Don Quichote*. (NHG)
… **with** these words Sancho turned to Don Quixote.

(161) … ***mit** dem 13. Jh. beginnen uns auch Hofmaler und höf. Architekten entgegenzutreten*. (NHG)
… **with** the 13th century, we begin to encounter court painters and court architects.

(162) *Die Direktive wurde gleichzeitig **mit** einem Dokument „Grundsätzliche Ansichten des Komitees der Nationalen Einheit betreffend die Probleme, denen sich das Land gegenüber sieht“ veröffentlicht*. (NHG)
The directive was published simultaneously **with** a document “Foundational views of the Committee of National Unity concerning the problems, which the country is faced with”.

(163) *Giordano (eigentlich Filippo) Bruno, 1548 zu Nola geboren, trat **mit** 15 Jahren in den Dominikanerorden*... (NHG)
Giordano (actually Filippo) Bruno, born in 1548 to Nola, entered into the Order of Saint Dominic **at** 15 years old…

(164) *Sollte es ja einmal nicht möglich sein,* ***mit*** *dem Glockenschlage anzutreten*... (NHG)
If it should indeed not be possible, to report **on** (lit: **with**) the stroke of the clock…

This frame inherits from the non-lexical frame TEMPORAL_CONCOMITANCE, as it indicates two events or actions happening at the same time, a more specific temporal relationship than in the parent frame. The FEs Occurrence and Co-occurrence correspond to Event 1 and Event 2, respectively.

A noteworthy comment about this frame is that there are many instances in which it is not clear whether *mit* is evoking this frame or the TOGETHERNESS frame, such as in examples (147), (148), (149) and (153), all of which are discussed above. This occurs mostly in the older time periods, as all the examples called out are from OHG and MHG. This may be an indication that this usage was not yet fully codified, i.e. had not yet entered Traugott and Dasher's Stage II (coded) meaning, until a later time period, though further data is needed to confirm.

This frame occurs across all examined time periods of the language, though a bit more often in the modern time periods, as shown in table 5.14 below.

CONCURRENCE	clear	ambiguous	total
OHG	1	6	7
MHG	1	9	10
ENHG	7	6	13
NHG	8	11	19
total	17	32	49

Table 5.14: CONCURRENCE data

5.1.2.2. CIRCUMSTANCE

Inheriting directly from CONCURRENCE is the CIRCUMSTANCE frame. The frame elements that must occur together with *mit* in order to evoke this frame are Circumstance and Action or State of Affairs (the latter two making up a core set, i.e., only one of them can be instantiated). The FEs Action and State of Affairs are both instantiated by actions or states that hold under the specified Circumstance. Some examples of the instantiation of Action include *truhtin mihhilosota sína miltida* in example (169) and *ane bete heymelichen dynen vater* in example (171). Instantiations of State of Affairs, which occur more frequently than Action, include *thiz ist unodi*, *es hat ein andern bescheid,* and *junge Menschen sind oft sehr leicht bei der Hand*, which occur in examples (165), (173), and (180), respectively. The FE Circumstance is instantiated most frequently with people or divine figures (compare NHG usage of *bei* in the sense of *bei mir ist alles in Ordnung*) as shown in examples (165), (166), (168), (169), and (172). It should be noted here that the instantiation of Circumstance by a person is more frequent in OHG and MHG

than ENHG and NHG. Other instantiations of this FE include weather conditions such as *solchem sturmwetter / wie wir darin komen* in example (174) along with various other situations which do not seem to have commonalities.

In the examples below, the Action and State of Affairs are highlighted in teal (light gray if printed in black and white) and the Circumstance is highlighted in purple (dark gray if printed in black and white).

(165) *Scouuuonti ther heilant quad in:* ***mit*** *mannon thiz ist unodi,* ***mit*** *gote alliu sint odi.* (OHG)
Looking around, the holy one spoke to them: **with/among** men, this is impossible, **with** God, everything is possible.

(166) *Got uueiz íúuuariu herzun, bidiu thaz* ***mit*** *mannon hoh ist, thaz ist leidlih fora gote.* (OHG)
God knows your hearts, for that which is great **among** mankind is wretched before God.

(167) *Ist* ***mit*** *íu giuuona thaz ih íu einan forlazze in ostron: uuenan uuollet ir thaz ih íu forlázze, Barrabban oda then heilant…* (OHG)
[It] is **among** you all custom that I release one at Easter: whom would you like me to release, Barrabban or the holy one…

(168) *… bithiu uuanta n ist unodi* ***mit*** *gote íogiuuelih uuort.* (OHG)
… for any word is not impossible **with** God.

(169) *Inti gihôrtun thaz thô ira nahiston inti ira cundon, thaz truhtin mihhilosota sína miltida* ***mit*** *iru…* (OHG)
And the closest ones to her and her friends heard it then, that the lord made larger his compassion **with** her/**in** her **case**…

(170) *Daz spricht waz sal ich tuon* ***mit*** *ihcen den man dar heizet cristus?* (MHG)
That says: what shall I do **with/in the case of** Jesus, whom one calls Christ?

(171) *Vnde* ***mit*** *beslozzener tur ane bete heymelichen dynen vater…* (MHG)
And **with** closed door, worship secretly your father…

(172) *Dann* ***mit*** *vns ist es ohn von noethen / wir wissen Gottes Wort…* (ENHG)
For **among** us, it is necessary anyway that we know the word of God…

(173) *Dann* ***mit*** *dem alten Testament hat es ein andern bescheid…* (ENHG)
For **in the case of** the Old Testament, it has another choice…

(174) *Aber* ***mit*** *solchem sturmwetter / wie wir darin komen weren / wüsten sie nit darein zukommen.* (ENHG)
But **in the case of** such stormy weather / as we would have come in / they would not know [how] to enter.

(175) *Demetrivs als er merckte / das die Vnderthonen vnd gemain des Adls* ***mit*** *jme nit zufriden waeren…* (ENHG)
Demetrius, as he became aware that the subjects and community of nobles were not happy **with** him…

(176) *Wesentlich anders steht es* ***mit*** *der nächsten Angabe…* (NHG)
It is considerably different **in the case of** the next task…

(177) ***Mit*** *geradem Streifen oder Schrägstreifen ist ein Schlitz mit akkurater Spitze folgendermaßen zu arbeiten…* (NHG)
In the case of straight stripes or diagonal stripes, a slit is to be done with precise point in the following way…

(178) ***Mit*** *jedem einzelwissenschaftlichen Bereiche führen neue und unableitbare Voraussetzungen sich ein…* (NHG)
In the case of each individual-scientific field, new and underivable suppositions introduce themselves…

(179) *Seine apparativ gemessenen Unterbrechungen werden* ***mit*** *Ausnahme der Fütterungspausen von den Eltern in der Regel nicht wahrgenommen.* (NHG)
His measured breaks are usually not perceived by his parents, **with** the exception of feeding breaks.[99]

(180) ***Mit*** *dem "Ehrenwort", dem großen wie dem kleinen, sind junge Menschen oft sehr leicht bei der Hand.* (NHG)
With the „word of honor", the large and the small alike, young people are often very frivolous.

This frame is a child frame of CONCURRENCE in that, instead of two actions or events occurring simultaneously, the Action that happens or the State of Affairs that holds at a particular point in time actually depends upon having the right Circumstance happen at the same time. Thus the FE Circumstance correlates to Co-occurrence and Action and State of Affairs correlate to Occurrence.

[99] Example (179) is problematic and does not fit perfectly into this frame. I have categorized it into this frame, however, due to the fact that *Ausnahme* seems to fill the role of the FE Circumstance better than any other FEs from other frames. It is quite possible that there is another frame evoked by *mit* into which this example would fit more appropriately but it did not occur in the data collected.

An interesting thing to note with regard to this frame is that, in many cases, the preposition *mit* corresponds to two of the NHG uses of *bei*, namely the *in the case of* meaning and the *among* meaning.

This frame is evoked across all time periods, though only occurs once in the MHG data, as shown in table 5.15 below.

CIRCUMSTANCE	clear	ambiguous	total
OHG	6	0	6
MHG	1	0	1
ENHG	4	0	4
NHG	10	1	11
total	21	1	22

Table 5.15: CIRCUMSTANCE data

5.1.3 RECIPROCAL_CONCOMITANCE

The frames in this section all relate back to the common, non-lexical, ancestor frame RECIPROCAL_CONCOMITANCE. This frame deals with two general participants involved in a shared activity, such as in the English sentence *Deshawna played softball with her*. In this sentence, there are two participants, *Deshawna* and *her* and the shared activity of *playing softball*. The frame elements of this frame are thus Participant 1, Participant 2, and Activity. Participant 1 and Participant 2 correlate to Occurrence 1 and Occurrence 2 of the parent frame Concomitance.

The inheritance tree under RECIPROCAL_CONCOMITANCE is shown in figure 5.3 below.

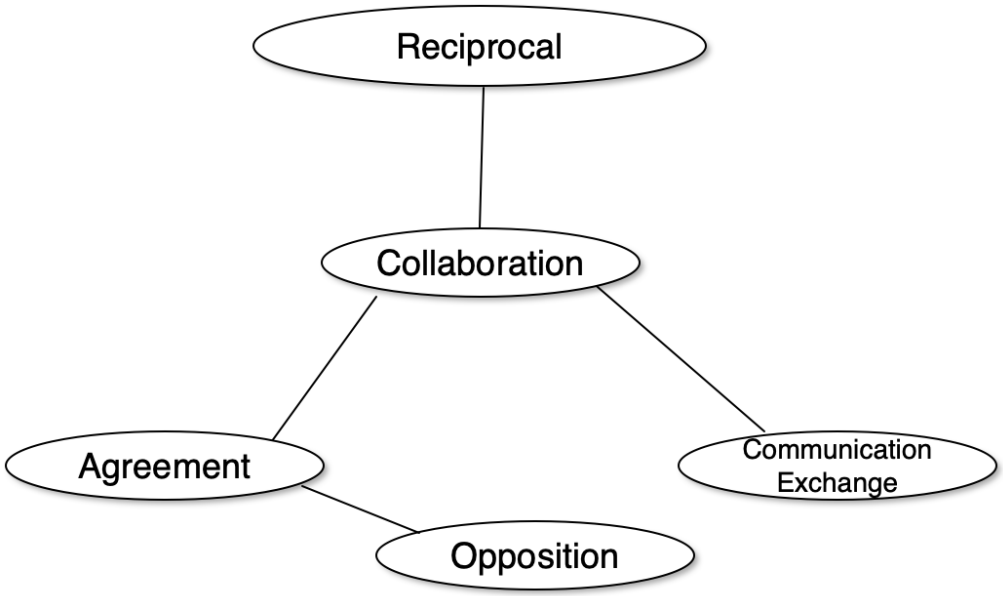


Figure 5.3: Frames under RECIPROCAL_CONCOMITANCE

In the following subsections, the four frames which relate back to RECIPROCAL_CONCOMITANCE are discussed.

5.1.3.1 COLLABORATION

The first and only frame the inherits directly from RECIPROCAL_CONCOMITANCE is COLLABORATION. The frame elements of this frame are Instigator, Collaborator, and Collaboration. The FEs Instigator and Collaborator, are–in all cases with the exception of example (187) discussed below–instantiated by living beings. The Collaboration is instantiated by a shared activity, such as *thaz gideild* and *teile erbi* in examples (181) and (183), respectively. This is the case with all examples occurring in the data with the exception of (195), which is also discussed below.

In the examples below, the Instigator is highlighted in teal with white text (medium gray if printed in black and white), the Collaborator is highlighted in purple with white text (dark gray if printed in black and white), and the Collaboration is highlighted in light gray with black text.

(181) *Gab her imo dugidi, Fronisc githigini, Stuol hier in Urankon. So bruche her es lango! Thaz gideild er thanne sar* ***mit*** *Karlemanne, Bruoder sinemo…* (OHG)
He gave him goodness, great soldiers, throne here in Francia. May he enjoy it long! He shared that then immediately **with** Karlemanne, his brother.

(182) *So sezzet min ein magitin dar tes tiris uard ist. So ez sigesihit, so lofet ez ziro. Ist siu denne uuarhafto magit, so sprinet ez in iro parm unde spilit* ***mit*** *iro.* (OHG)
Thus man sets a maiden where the trace of an animal is. If it sees her, then it runs to her. If she [is] a true maiden, then it jumps into her lap and plays **with** her.

(183) *Meistar, quid minemo bruoder thaz her teile* ***mit*** *mir erbi.* (OHG)
Master, speak to my brother so that he divides the inheritance **with** me.

(184) *Inti uuard thó, mittiu sie sprachun inti* ***mit*** *ín suohtun…* (OHG)
And [s/he/it] was then/there, while they spoke and searched **with** them.

Example (184) above is marked as ambiguous because the two verbs occurring with only one instance of *mit* evoke two different frames, namely that of COLLABORATION and that of COMMUNICATION_EXCHANGE. The FEs occurring to evoke COLLABORATION are marked in the example above. The frame elements from the COMMUNICATION_EXCHANGE frame are Interlocutor 1, Interlocutor 2, and Communication. These three FEs are instantiated in the example above as *sie*, *ín,* and *sprachun* respectively.

(185) *Thie fon thir sihuues bite, gíb imo, inti thie thár uuolle* ***mit*** *thír uuehslon, ni uuidaro iz thanne.* (OHG)
He who asks for something from you, give [it] to him and he who wants to trade **with** you, do not reject it then.

(186) *… lobet unseren herren* ***mit*** *mir*…CNI (MHG)
…[you all] praise our Lord **with** me…

(187) *Wand dv hast des vater zorn / Hin geleit in grozer list /* ***Mit*** *der martyr mittewist…* (MHG)
Because you laid down the anger of the father in great trickery **with** the participation of the martyr…

The instantiation of the FE Collaborator in this role varies slightly from the other examples in that the actual action of participation is stated in the phrase *der martyr mittewist*, rather than the participating person.

(189) *…vnd das ich* ***mit*** *einander mug sechen vnd volpringen deinen wolgefalligen wyllen.* (ENHG)
… and that I may see **with** another and fulfill your pleasing will.

(190) *Der ain Sun was Emanvelis des Khuenigs zu Constantinopl / des geschlechts der Paleologorvm* ***mit*** *der er fuenff Suen erworben / Gabrieln, Demetern, Georgen, Simeon, and Andreen…* (ENHG)
The one son was Emanuelis of the king of Constantinople, of relation to Paleologorum **with** whom he obtained five sons: Gabriel, Demeter, Georg, Simeon, and Andreas…

(191) *Naiget euch* ***mit*** *vnns.* (ENHG)
(You all) kneel **with** us.

(192) *Donoch komend su in das hus, das stiesßend die schinder* ***mit*** *landadel an…* (ENHG)
Afterward they came into the house, so that the brigands clinked glasses **with** the gentry…

(193) *Der aber vber kam das Kuenigreich Poln* ***mit*** *seiner Praut im 1383 Jar.* (ENHG)
He, though, inherited the kingdom of Poland **with** his bride in the year 1383.

Example (193) above also has a TOGETHERNESS interpretation in which *he inherited the kingdom and he inherited his bride* as opposed to the COLLABORATION interpretation in which *he and his bride both inherited the kingdom.* In the TOGETHERNESS reading, *das kuenigreich Poln* instantiates the FE Party and *seiner Praut* instantiates the FE Co-party.

(194) *Dit siet ir wale an den die umbegeint* ***mit*** *vuorkoufe inde* ***mit*** *dieseme wine inde* ***mit*** *diesen corne…* (ENHG)
This you all see well on those who deal **with** preemption and **with** this wine and **with** this grain…

(195) *In diesem Zusammenhang machte ich unsere Unterstützung für diese Bemühungen und unsere engste Zusammenarbeit* ***mit*** *ihnen klar.* (NHG)
In this regard, I made clear our support for these efforts and our closest collaboration **with** them.

In example (195) above, the instantiation of the FE Collaboration differs slightly from the rest of the instantiations of this FE in that rather than a specific activity being stated, the general activity of *Zusammenarbeit* is stated.

(196) *Der Kalahariführer Duncan und der uralte Hottentott Aufries sagten, sie seien schon einmal dort gewesen auf der Jagd* ***mit*** *Duncans Vater zusammen in einem guten Wasserjahre.* (NHG)
The Kalahari guide, Duncan, and the ancient Hottentot, Aufries, said they had been there once already, hunting together **with** Duncan's father in a good water year.

(197) *Der Verkehr* ***mit*** *Pilzen bedarf, bedingt durch die gifthaltigen, jedoch morphologisch in ähnlichen Formen auftretenden Pilzarten einer besonders spezifizierten Kontrolle.* INI (NHG)
The trade **with** mushrooms requires, necessitated by the mushroom types that are poisonous yet appear morphologically in similar forms, an especially specified inspection. INI

This frame is a child frame of the RECIPROCAL_CONCOMITANCE. It is a more specific sense of the parent frame in that one of the participants incites the activity (the Instigator), whereas, in the parent frame, there are merely two participants whose roles in the shared activity are unspecified. The frame elements Instigator, Collaborator, and Collaboration correspond respectively to the parent frame FEs Participant 1, Participant 2, and Activity.

This frame occurs across all time periods, though not with much frequency, as shown in table 5.16 below.

COLLABORATION	clear	ambiguous	total
OHG	5	2	7
MHG	4	0	4
ENHG	5	1	6
NHG	3	0	3
total	17	3	20

Table 5.16: COLLABORATION data

5.1.3.2 AGREEMENT

Inheriting directly from COLLABORATION is the AGREEMENT frame. The frame elements required to occur along with *mit* in order to evoke this frame are Party 1, Party2, and Agreement. The FEs Party 1 and Party 2 are almost always instantiated by living beings or, metonymically, institutions or locations which are named in place of the living beings who live or work there. The three exceptions to this occur in the NHG examples (207), (208), and (209) and are discussed below. The FE Agreement may either be instantiated by a noun which signals a binding agreement such as *gizunfti fon tagelone* in example (198), *einen friden* in example (204) or *einen Handelsvertrag* in example (205), or it may be instantiated by an action of agreement such as *ni gizunftigotas fon themo phennige* in example (199), *nit gleichhellig* in example (202), or *übereinstimmt* in example (208). Additionally, the FE Agreement may be instantiated by an adjective such as *unvereinbar* in example (207).

In the examples below, the FE Party 1 is highlighted in teal with white text (medium gray if printed in black and white), the FE Party 2 is highlighted in purple with white text (dark gray if printed in black and white), and the FE Agreement is highlighted in light gray with black text.

(198) *Gizunfti gitanera* ***mit*** *then uurhton fon tagelone santa sie in sinan uuingart.* DNI (OHG)
Agreement made **with** the workers about the daily wage, [s/he] sent them into his vineyard. DNI

(199) *Friunt, ni tuon ih thír hárm: eno ni gizunftigotas tu thíh* ***mit*** *mir fon themo phennige?* (OHG)
Friend, I do you no harm: now you do not agree **with** me about the money?

(200) *Thie* ***mit*** *mir n ist, ther ist uuidar mír…* DNI (OHG)
He who is not **with** me, he is against me… DNI

Example (200) above also carries a TOGETHERNESS interpretation, which has the reading *he who is not here in the vicinity of me is against me*. In that reading, the FE Party is instantiated by *thie* and the FE Co-party is instantiated by *mir*. In the AGREEMENT reading, the interpretation is *he who is not in agreement with me is against me*. In this case, the FE Agreement is marked as DNI, because whatever the parties are supposed to be agreeing on is not stated in the sentence, but was most likely mentioned in previous discourse.

(201) *Der* ***myt*** *myr nicht ist, der ist wedir mich vnde der* ***myt*** *mir nicht sament der czustrouwet.* (MHG)
He who is not **with** me, he is against me and he who does not agree **with** me, he dispels.

As in the previous example, example (201) has the additional reading of TOGETHERNESS in the first part of the sentence in which that reading is *he who is not here in the vicinity of me is against me*. Again, in that case, the FE Party is instantiated by *Der* and the FE Co-party instantiated by *myr*.

(202) *Sambt des Mofcouiter gepiet / vnd seiner anrainer beschreibung vnd anzaigung / in wen sy glaubens halb /* ***mit*** *vns nit gleichhellig.* (ENHG)
Together with the Moscow area and its description of its residents and indication in which they, because of belief, [are] not in agreement **with** us.

(203) *… dann sy* ***mit*** *vns ainhellig gewest sein.* (ENHG)
… then they were in agreement **with** us.

(204) *Jten der telffin mach einen friden* ***mit*** *der stat basel.* (ENHG)
Even the dauphin wants a peace treaty **with** the city of Basel.

(205) *Die Verhandlungen über einen Handelsvertrag* ***mit*** *Frankreich werden abermals vertagt.* DNI (NHG)
The negotiations about a trade agreement **with** France are once again postponed. DNI

(206) *... jedoch stellten die Verleger des Mirror, der New York Herald Tribune, des Long Island Star Journal, der Post und der Long Island Press aus Solidarität* ***mit*** *den bestreikten Zeitungen ebenfalls ihr Erscheinen ein.* (NHG)
… nevertheless the publishers of the Mirror, the New York Herald Tribune, the Long Island Star Journal, the Post, and the Long Island Press stopped publishing out of solidarity **with** the striking newspapers.

(207) *UN-Generalsekretär PEREZ de CUELLAR nannte diesen Beschluß unvereinbar* ***mit*** *den Verpflichtungen der USA aus dem Gastlandabkommen von 1947.* (NHG)
UN General Secretary Perez de Cuellar called this decree incompatible **with** the commitments of the USA from the host-country compact of 1947.

In example (207) above, the FEs Party 1 and Party 2 are not instantiated as living beings or metonymically as institutions which stand for the people who make up those institutions, as is the case for most of the examples in this frame. Party 1 is instantiated rather by *diesen Beschluß* and Party 2 is instantiated by *den Verpflichtungen der USA aus dem Gastlandabkommen von 1947*, both of which stand metonymically for the person or people who made the decree and the person or people who made the commitments, respectively.

(208) *... und daß dieses Ziel* ***mit*** *den Aufgaben des Europarats übereinstimmt, wie sie im Artikel I von dessen Statut niedergelegt sind…* (NHG)
… and that this goal agrees **with** the tasks of the Council of Europe, as they are laid out in Article I of its statute…

As in the previous example, in (208) above, the FE Party 1 is not instantiated by a living being, but rather metonymically by *dieses Ziel,* which stands for the person or persons who set the goal. *Den Aufgaben des Europarats*, which instantiates Party 2, includes both the institution (*des Europarats*), which stands metonymically for the people of the institution, and an activity of the institution.

(209) *Lächerlich ist der sich* ***mit*** *der gesellschaftlichen Harmonievorstellung innerlich und äußerlich nicht vereinende Mensch.* (NHG)
Absurd is the individual who is not unifying themselves inside and out **with** the societal concept of harmony.

In example (209) above, Party 2 is instantiated as a concept, *der gesellschaftlichen Harmonievorstellung*, rather than a living being; however, it does include the adjective *gesellschaftlichen* which implies that the concept is a product of a society of living beings.

This is a child frame of COLLABORATION, as the two participants from the parent frame, Participant and Collaborator, correlate with the two parties, Party 1 and Party 2, and the FE Collaboration from the parent frame correlates with a more specific type of collaboration, namely an Agreement.

This frame is evoked across all time periods of the language, as shown in table 5.17 below.

AGREEMENT	clear	ambiguous	total
OHG	3	0	3
MHG	0	2	2
ENHG	3	0	3
NHG	16	0	16
total	22	2	24

Table 5.17: AGREEMENT data

5.1.3.3 OPPOSITION

The next frame under discussion is OPPOSITION, which is a negative perspective on AGREEMENT. The frame elements that must occur along with *mit* in order to evoke this frame are Opponent 1, Opponent 2, and Disagreement. The FEs Opponent 1 and Opponent 2 are almost always instantiated by living beings or things that are often personified, such as *dem tod* in example (214) and *der noch ungebändigten und urwüchsigen Natur* in example (217). The one exception to this is example (219), which is discussed below. The FE Disagreement is always instantiated by either a verbal action of disagreeing, such as *striten, hatt ein span,* and *gerungen* in examples (212), (213), and (214), respectively, or a noun expressing disagreement, such as *die Auseinandersetzung, Widerspruch,* and *den Kampf* in examples (217), (218), and (220), respectively.

In the examples below, the Opponent 1 is highlighted in teal with white text (medium gray if printed in black and white), the Opponent 2 is highlighted in purple with white text (dark gray if printed in black and white), and the Disagreement is highlighted in light gray with black text.

(210) *Inti themo uuolle* ***mit*** *thir in strîte bagen inti thina tunichun neman…* (OHG)
And if anyone wants to fight **against** you and take your tunic…

(211) *Wettu irmingot quad hiltibraht obana ab heuane dat du neo dana halt* ***mit*** *sus sippan man dinc ni gileitos…* (OHG)
I call upon you, God above in heaven, spoke Hildebrandt, that you never again battle **against** such a closely related man…

(212) *… daz wir an disen geziten* ***mit*** *chananeo ouch striten…* (MHG)
… that we fight **against** Chanaan too at this time…

(213) *… cerca festun galli hatt Hertzog olbrecht von oesterich ein span* ***mit.*** *den von colmar von erberlin…* (ENHG)
… around the fortress of the Gauls, Duke Albrecht of Austria had a fight **against** those of Colmar, those from Erberlin…

(214) *... zum dritten mal gefallen vn seinen himlischen Vatter gebetten / alda er auch* ***mit*** *dem tod gerungen...* (ENHG)
… fell for the third time and begged his holy father / at that time he also struggled **against** death…

(215) *... aber er halff jm trewlich sich zu wapnen /* ***mit*** *jm zu streitten...* (ENHG)
… but he faithfully helped him arm himself / to fight **against** him…

(216) *... hett er dich inn eyn weiß leilach gelegt / were dir senffter vnd besser / dan* ***mit*** *mir zu streitten gewesen.* DNI (ENHG)
… had he lay you in a white sheet / to you [it] would have been softer and better / than fighting **against** me. DNI

(217) *Den kolonialen Weg, wo einer an alle Dinge und alle Menschen gerät und, wenn er mehr ist als ein Stubenvogel, auch den Zusammenhang und die Auseinandersetzung* ***mit*** *der noch ungebändigten und urwüchsigen Natur notwendig erlebt, konnte Grimm in der Heimat kein zweites Mal gehen.* (NHG)
The colonial path, where one comes across all things and all people and, if he is more than a caged bird, also needfully experiences the connection and the conflict **with** the yet untamed and untouched nature, Grimm in his homeland could not go a second time.

Example (217) above is noteworthy ,as *mit* is used to relate both *den Zusammenhang* and *die Auseinandersetzung* to the noun phrase following the preposition under examination. I have highlighted above the FEs for the OPPOSITION frame. In the CONNECTION frame the FE Party 1 is instantiated by *er*, Party 2 by *der noch ungebändigten und urwüchsigen Natur* and the FE Relationship by *den Zusammenhang*.

(218) *Dieser hat im Widerspruch* ***mit*** *allen anderen Zeugen, sogar im Innern des Heidemannschen Hauses Feuer gesehen.* (NHG)
This one, in contradiction **with** all other witnesses, saw fire even in the interior of the Heidemannschen house.

(219) *Zu einem großen Braten können Sie einen roten Bordeaux aus Médoc, Saint-Emilion, Pomerol und Graves, einen Burgunder der Côte d'Or servieren oder einen der deutschen Rotweine von der Ahr oder aus Aßmannshausen, die* ***mit*** *den Burgunderlagen der Côte d'Or in sehr guten Jahren durchaus konkurrieren können.* (NHG)
With a large roast you could serve a red Bordeaux from Médoc, Saint-Emilion, Pomerol and Graves, a Burgundy from the Côte d'Or, or one of the German red wines from the Ahr or from Aßmannshausen, which can absolutely compete **with** the Burgundy from the Côte d'Or in very good years.

Example (219) above deviates slightly from the pattern of instantiations of the FEs Opponent 1 and Opponent 2 in that, rather than living beings, the FEs are instantiated by types of wine. In this case, the wines are merely being personified, as foods or any type of inanimate object cannot actually engage in conflict.

(220) *An dem verkleinerten, schwankenden Boot des Militärstaates hängen Hunderte, Tausende, Zehntausende zweifelhafter Existenzen, die, zu faul und zu feige und auch wohl zu unfähig, im bürgerlichen Leben den Kampf* ***mit*** *dem Dasein aufzunehmen, den Staat in räuberischer Weise belasten.* (NHG)
On the shrunken, swaying boat of the military state hang hundreds, thousands, tens of thousands of doubtful existences, which, too lazy and too cowardly and also probably too incapable to take up the fight **with** Being in civil life, burden the country in predatory ways.

This frame is a negative perspective on AGREEMENT because each of the frame elements in this frame associate with the frame elements in AGREEMENT as negative correlations. Thus Opponent 1, Opponent 2, and Disagreement correlate to Party 1, Party 2, and Agreement, respectively.

This frame is evoked across all time periods examined, though with little frequency as shown in table 5.18.

OPPOSITION	clear	ambiguous	total
OHG	2	0	2
MHG	1	0	1
ENHG	6	0	6
NHG	7	1	8
total	16	1	17

Table 5.18: OPPOSITION data

5.1.3.4 COMMUNICATION_EXCHANGE

The next frame under discussion is COMMUNICATION_EXCHANGE, which inherits directly from COLLABORATION. The frame elements that must occur together with *mit* in order for this frame to be evoked are Interlocutor 1, Interlocutor 2, and Communication. Both the FEs Interlocutor 1 and Interlocutor 2 are instantiated by people in all cases across all time periods examined. The FE Communication is instantiated by either a verbal action of communication, such as *sprihhit* in example (223), *vndter halten* in example (227), and *plaudern* in example (233) or by a noun that states the type of communication such as *der Unterhaltung* in example (231) and *die Unterrredungen* in example (234).

In the examples below, the Interlocutor 1 is highlighted in teal with white text (medium gray if printed in black and white), the Interlocutor 2 is highlighted in purple with white text (dark gray if printed in black and white), and the Communication is highlighted in light gray with black text.

(221) *Uuip, obe thu uuissis, uuielih gotes gift ist, unte den ercantis,* ***mit*** *themo du kosotis…* (OHG)
Woman, if you knew what God's gift is, and [if you] recognized **with** whom you spoke…

(222) *Vbe du frilichen gotes reht chosen uuellest* ***mit*** *den fursten dere uuerlte, so pilide Iohannem baptistam.* (OHG)
If you wish to speak the message of God freely **with** the rulers of the world do as John the Baptist.

(223) *Thu gisahi inan, inti ther* ***mit*** *dír sprihhit, ér ist iz.* (OHG)
You saw him and he speaks **with** you, he is it.

(224) *Inti uuard thó, mittiu sie sprachun inti* ***mit*** *ín suohtun.* (OHG)
And [s/he/it] was then/there, while they spoke and searched **with** them.

Example (224) above is marked as ambiguous because the two verbs occurring with only one instance of *mit* evoke two different frames, namely that of COLLABORATION and that of COMMUNICATION_EXCHANGE. The FEs occurring to evoke COLLABORATION are Instigator, Collaborator, and Collaboration which are instantiated as *sie*, *ín,* and *suohtun* respectively.[100]

(225) *Iu ni managiu sprihu* ***mit*** *íu.* CNI (OHG)
Now [I] will not speak much **with** you all.

(226) *… die handlungen vnd fuerfallende sachen* ***mit*** *dreyen oder viern der elltern brueedern beratschlagen…* DNI (ENHG)
…to consult (on) the actions and the things that are happening **with** three or four of the older brothers… DNI

(227) *Briester vnd Pharrer werden gemainclichen vndter halten* ***mit*** *der Besamlungen von pharleueten.* (ENHG)
Priests and pastors will converse together **with** the assembly of the parish.

(228) *… vnd ruoff volrich schutz zuo den von basel gnedeklich vmb einen friden j stunt* ***mit*** *jnnen zuo reden, es halff nutz.* (ENHG)
… and Ulrich declares safety to those from Basel mercifully for 1 hour of peace in order to talk **with** them, it didn't help.

[100] This example also appears as example (184) in the section that discusses the frame COLLABORATION (see section 5.1.3.1).

(229) *... gegen dem abendt kam eyn grosser Nache voll wilder leuth bei das schiffe vnd wolten* ***mit*** *vns reden.* (ENHG)
… around evening came a large ship full of boisterous people by the ship and wanted to speak **with** us.

(230) *Dorumb hat Paulus* ***mit*** *den Aposteln conferyrt…* (ENHG)
About this Paul conferred **with** the apostles…

(231) *Der Schaffner gebrauchte auf der kurzen Strecke (in der Unterhaltung* ***mit*** *einem befreundeten Fahrgast) die Wendung nicht weniger als dreimal.* (NHG)
The conductor, on the short distance (in the conversation **with** a befriended passenger), used the expression no less than three times.

(232) *Sie lacht, sie winkt nach allen Seiten und tauscht fröhliche Rufe* ***mit*** *völlig Unbekannten.* (NHG)
She laughs, she waves in all directions and exchanges joyful cries **with** complete strangers.

(233) *Sie sei allein wie er, und sie möge sich nicht zieren und wenigstens nett* ***mit*** *ihm plaudern.* (NHG)
She is alone, like him, and she did not like to play coy and at least chat **with** him nicely.

(234) *Er sagte, die Unterredungen* ***mit*** *den verschiedenen Gesprächspartnern seien konstruktiv verlaufen…* DNI (NHG)
He said the conversations **with** the various interlocutors were constructive… DNI

(235) *Am 1. April 1945 trafen die alliierten Unterhändler* ***mit*** *Waibel Husmann wieder in Ascona zusammen…* (NHG)
On April 1, 1945 the allied negotiators met again **with** Waibel and Husmann in Ascona…

This is a child frame of COLLABORATION as communication is a more specific type of interaction between two sentient beings. This is reflected mostly by the frame element Communication, which correlates to the FE Collaboration in the parent frame. The FEs Interlocutor 1 and Interlocutor 2 correlate to Instigator and Collaborator, respectively.

This frame occurs in the OHG, ENHG, and NHG data as shown in table 5.19 below. The lack of data evoking this frame in the MHG period is most likely due to the size of the study at hand.

COMMUNICATION_EXCHANGE	clear	ambiguous	total
OHG	8	1	9
MHG	0	0	0
ENHG	12	0	12
NHG	14	0	14
total	34	1	35

Table 5.19: COMMUNICATION_EXCHANGE data

Interesting to note is that 34 out of the 35 examples that evoke this frame are not ambiguous. The only occurrence of an ambiguous example (example (224) above) is marked as such because it involves two verb phrases which instantiate FEs of two different frames, as discussed above.

5.1.4 INSTRUMENTAL_CONCOMITANCE

The INSTRUMENTAL_CONCOMITANCE frame involves an action being performed with some kind of aid, such as in the English sentence *Divya hit the ball with the bat*. In this sentence, an action is being performed, namely *Divya hit the ball*, with the aid of an object, *the bat*. The two required frame elements thus are (a very generic) Aid and an Action which correlate to the FEs Occurrence 1 and Occurrence 2 in the parent frame of CONCOMITANCE.

The frames in this sectional all relate back to INSTRUMENTAL_CONCOMITANCE, as depicted in figure 5.4 below. The frames INSTRUMENT, MANNER, and MEANS inherit directly from this mid-level frame. Stemming from these frames in various ways (discussed below) are MATERIAL, AGENTIVE, and CAUSE.[101]

[101] An instrumental usage frame may seem odd to pair with the concept of Concomitance at first; however, Lakoff and Johnson discuss a metaphor which connects the gap nicely, namely the metaphor AN INSTRUMENT IS A COMPANION (Lakoff & Johnson 1980: 134–135). Introducing this conceptual metaphor, the authors cite the fact that children often talk to their toys as though they are companions and adults treat certain possessions, such as cars and guns, as companions, even giving them names. They even (though briefly) discuss why the English preposition *with* (which is most often the counterpart to German *mit*) can signify both instrumentality and accompaniment, comparing the two usages in the examples *I went to the movies with Sally* and *I sliced the salami with a knife*. The authors then state that this metaphor holds in most world languages, proposing the principle "The word or grammatical device that indicates accompaniment also indicates instrumentality" (Lakoff & Johnson 1980: 135).

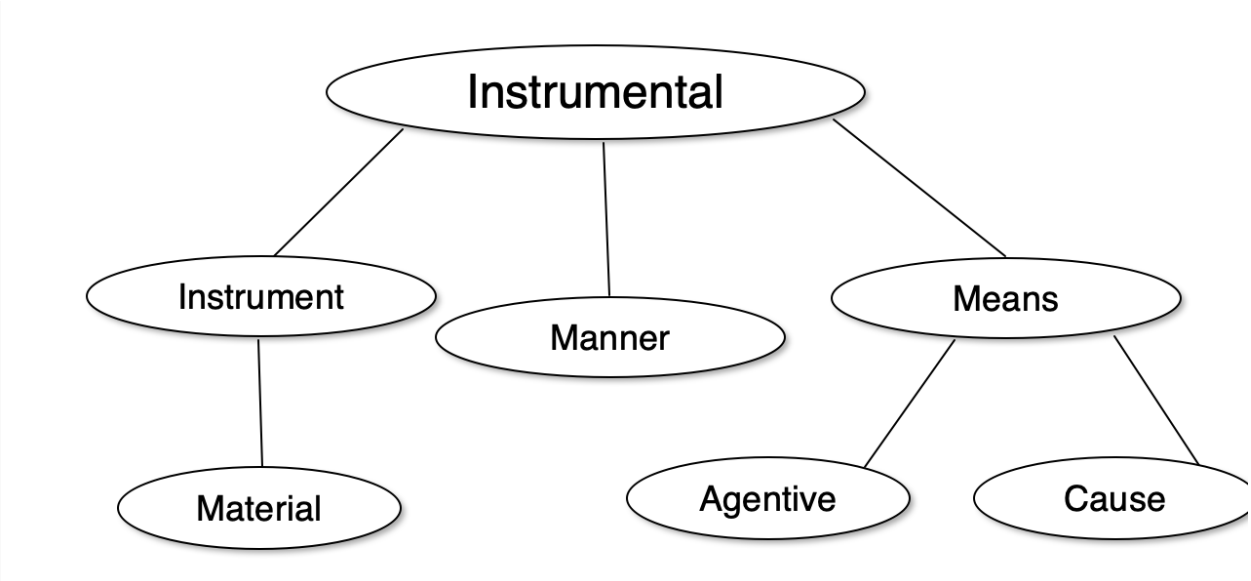


Figure 5.4: Frames under INSTRUMENTAL_CONCOMITANCE

In the following subsection, the six frames named above are discussed in a logical order.

5.1.4.1 INSTRUMENT

The first frame under discussion in this section is INSTRUMENT. The frame elements which must be instantiated along with *mit* to evoke this frame are Action and Tool. The FE Action is instantiated by various actions, from *sie sluogun inan* in example (239) to *Entfernen Sie also den Staub* in example (253). The FE Tool is more specific, as instantiations of this FE are restricted to tool-like objects (including body parts used as tools), such as *dinu skiltu* in example (240), *oren* in (242), *dem sper* in (247), and *dem kurzen Spaten* in example (255).

In the examples below, the word or words that instantiate the Tool used to perform an action are highlighted in purple (dark gray if printed in black and white). The Action which is done using the instrument is highlighted in teal (light gray if printed in black and white).

(236) *Er quat, Gorio wâri ein goukelâri, hiez er Gorion vâhan, hiez inan uzziohan,* (OHG)
hiez inan slahan harto ***mit*** *wuntarwasso swerto*.
He said, Gorio was a soothsayer, he commanded Gorio to capture, commanded him to set out, commanded him to hit hard **with** extremely sharp sword(-Instr).[102]

(237) *Ther heilant thô sih nidar neigenti* ***mit*** *sinemo fingare screib in erdu*. (OHG)
The holy-one then kneeling down writes **with** his finger in the dirt.

[102] Ehret lists the o-endings on *wuntarwasso* and *swerto* as instrumental (Ehret 1907: 12).

(238) *... unde alle die zoge, die imo uuiderstant an sînemo loufte, dîe segot ez abo* ***mit*** *déro uuassî sínero horne.* (OHG)
… and all the branches that withstood it on its run, it cut them off **with** the tip of its horns.

(239) *Tho spuuun sie sin annuzi, thiede inan habetun scimfitun inan inti thactun iro annuzi inti* ***mit*** *fustin sluogun inan.* (OHG)
Then they spat at his face, those who had insulted him, and covered their faces and beat him **with** fists.

(240) *Skurgi de suuarzun* ***mit*** *dinu skiltu.* (OHG)
Rush the dark ones **with** your shield(-Instr).

(241) *Ez wartet der suntaere dem rehtem un grischramet uf in* ***mit*** *zanden sin.* (MHG)
The sinner looked at the righteous and gnashed at him **with** his teeth.

(242) *Erhore gebet minez, herre, un dige mine* ***mit*** *oren.* (MHG)
Hear my prayer, Lord, and my plea **with** ears.

(243) *De iud longinus, der unsern herren ih-m xp̄M staech in die siten* ***mit*** *den sper…* (MHG)
The Jew, Longinus, who stabbed our Lord Jesus Christ in the side **with** the spear…

(244) *... dat sach he* ***bit*** *ougen inde hoird it* ***bit*** *oren.* (MHG)
… that he saw **with** eyes and heard it **with** ears.

(245) *Vnd mache ein teyc von semelmelwe, vnd wille daz* ***mit*** *eyner wellen.* (MHG)
And make a dough from flour and roll that **with** a rolling pin.

(246) *Das feslein des herczen xpin wurt durchstochen* ***mit*** *der lanczen…* (ENHG)
The small artery of the heart of Christ was pierced **with** the lance…

(247) *... das vnſſer pehallter da er jetzung ann dem heyllígen creůcz ſeinen heylligen geiſt het auf geben, das er lyd, das Sein heyllige seyten sollt durchstochen werden* ***mit*** *dem sper...* (ENHG)
… that our savior when he now on the holy cross gave up his holy spirit, that he suffers, that his holy sides should be pierced **with** the spear…

(248) *Jch vnnd mer haben gesehen in der Mosqua das die betrunckhnen briester* ***mit*** *gaisln auff der gassen geschlagen seind worden.* (ENHG)
I and others saw in the Mosque that the drunken priests were beaten **with** whips on the street.

(249) *... da er jme solches waigerte droet jm der Pristaw* ***mit*** *der Gaysl.* (ENHG)
… as he refused him such a thing, Pristaw threated him **with** the whip.

(250) ... *was sie nicht* ***mit*** *Augen sehen / oder* ***mit*** *Haenden greiffen.* (ENHG)
… what they do not see **with** eyes or grasp **with** hands.

(251) ... *von selbst öffneten sie sich, als der Kutscher nur ungeduldig davor* ***mit*** *der Zunge schnalzte...* (NHG)
… they opened themselves when the coachman clicked **with** his tongue impatiently in front of them…

(252) *Manche Sätze sind* ***mit*** *Rotstift unterstrichen.* (NHG)
Some sentences are underlined **with** red pen.

(253) *Entfernen Sie also den Staub* ***mit*** *einem weichen Lappen...* (NHG)
Remove the dust **with** a soft rag…

(254) ... *weil die Betreffende die üble Gewohnheit hat, die Temperatur des Badewassers* ***mit*** *dem Ellenbogen statt* ***mit*** *dem Thermometer zu messen...* (NHG)
… because the person in question had the bad habit of measuring the temperature of the bath water **with** her elbow instead of **with** the thermometer…

(255) *Es war sinnlos, in den Kalk* ***mit*** *dem kurzen Spaten eindringen zu wollen.* (NHG)
It was pointless to want to bore into the limestone **with** the short spade.

This frame is a child frame of INSTRUMENTAL_CONCOMITANCE as the frame element Tool is more specific than the corresponding frame element, Aid, from the parent frame. The FE Action in this frame corresponds to Action in INSTRUMENTAL_CONCOMITANCE.

This usage of *mit* is the fourth most frequent usage in the data with 142 instances. It occurs across all time periods of the German language as shown in table 5.20 below.

INSTRUMENT	clear	ambiguous	total
OHG	36	6	42
MHG	19	9	28
ENHG	36	10	46
NHG	20	6	26
total	111	31	142

Table 5.20: INSTRUMENT data

It should also be noted that in the case of the Old High German examples, many of the noun phrases following *mit* are marked with instrumental case endings. This has been noted in the translations, as it is unique to this usage of *mit* and the MATERIAL usage (the latter frame inheriting from this frame).[103] By the Middle High time period, the instrumental case endings were no longer used, so this distinction is only marked in the Old High German data.

[103] Any exceptions to this have been noted.

5.1.4.2 MATERIAL

The MATERIAL frame inherits from INSTRUMENT. The frame elements are Action and Material. In this frame, however, the object is not a tool or instrument, but rather some kind of material such as *lininimo, olu*, *wihewazzere*, and *Knoblauchzehe* in examples (256), (259), (261), and (273), respectively. In the earlier periods of the language, the FE Action is instantiated by a generic action, as is the case in the INSTRUMENT frame; however, in the ENHG and NHG periods, the Action is often instantiated by an act of covering or adorning, such as *vmbstock dein mayenpad* in example (269), *er bekränze der Jungfrau Maria Füße* in example (271) and *einen ganzen Bienenkorb aus Wachs verziert* in example (275). This may indicate a new usage of *mit* emerging in the latter time periods.

In the examples below, the Action is highlighted in teal (light gray if printed in black and white) and the Material is highlighted in purple (dark gray if printed in black and white).

(256) *Sum mán uuas otag inti garauuita sih **mit** gotauúebbę inti **mit** lininimo inti goumota gitágo berahto.* (OHG)
A certain man was well off and dressed himself **with** luxurious fabric and **with** linen and ate daily in splendid ways.

(257) *Lazarus, cum úz! Inti sliumo framgieng thie dar uuas tót, gibuntan hanton inti fuozin **mit** strengin inti sin annuzi **mit** sueizduohu gibuntan.* (OHG)
Lazarus, come out! And [he] went out, he who was dead, hands and feet bound **with** rope and his face bound **with** sudarium(-Instru).

(258) *Uozzirnita inan Herodes mit sinemo herige inti bismarota giuuatitan **mit** uuizzu giuuatu...* (OHG)
Mocking him, Herodes and his company ridiculed the one dressed **with** white clothing(-Instru)…

(259) *... thaz sie riuua tatin, inti managa diuuala úz vvurphun, inti salbotun **mit** olu manage siohhe inti heiltun.* (OHG)
… that they did penance and expelled many demons and salved **with** oil(-Instru) many sick and healed [them].

(260) *Zi hiu giengut úz sehan man **mit** uueihhen giuuatin giuuatitan?* (OHG)
Why did you all go out to see the man clothed **with** soft clothes?

(261) *... un sol ouch in an den suontagin die epistelin un dat ewangeliun lesin unde **mit** deme wihewazzre besprengin un zuo in gein mit ꝑcessione.* DNI (MHG)
… and [s/he] shall also on the Day of Atonement read the Epistles and the Gospel and be spritzed **with** the holy water and go to them with procession.

(262) *... vnd mache ez weich **mit** roen eyern...* (MHG)
… and make it soft **with** raw eggs…

(263) *Besprenge ez* ***mit*** *saltze vnd leg ez vf einen hultzinen rost.* (MHG)
Spritz it **with** salt and put it on a wooden grill.

(264) ... *cleide in* ***mit*** *einen duennen teige vnd ein blat von eyern*... (MHG)
… cover it **with** a thin dough and a sheet of eggs…

(265) *Man schol auch kain dehain vngerische Riemen* ***mit*** *alvn machen.* (MHG)
One shall also not make any Hungarian belts **with** alum.

(266) *Der Hans hat am ersten sein Stuel oder gesaeß zu der Mosqua* ***mit*** *gemeüern erpaut.* (ENHG)
Hans first built his chair or seat at the mosque **with** masonry.

(267) *Gleichwol der thail, so noch steht / vnd oben* ***mit*** *bley bedecket.* (ENHG)
Nevertheless, the part such as still stands and on top [is] covered **with** lead.

(268) *Vnd da Oliuier sahe / das sich Fierrabras* ***mit*** *dem Balsam gesundt gemacht het…* (ENHG)
And because Olivier saw that Fierrabras had made himself healthy **with** the balm…

(269) *Jtem vmbstock auch dein mayenpad* ***mit*** *dem edlen kraut rosmarin*... (ENHG)
Likewise adorn your May-bath **with** the precious herb rosemary…

(270) ... *das Dreytzehentausent schrit weit das Erdtrich* ***mit*** *todten Coerpern belegt war.* (ENHG)
… that thirteen thousand steps far, the ground was covered **with** dead bodies.

(271) ... *und er pflegte seitdem seine Wunden Rosen zu nennen,* ***mit*** *denen er der Jungfrau Maria Füße bekränze*... (NHG)
… and since then he kept calling his wounds roses, **with** which he garlands the feet of the Virgin Mary…

(272) ... *jahrelange Ablagerungen von Karbidstaub hatten ihre Mauern* ***mit*** *einem schmutziggrauen Film bedeckt*... (NHG)
… years-long residue from carbide dust had covered its walls **with** a dirty-gray film…

(273) *Den Fonduetopf* ***mit*** *einer Knoblauchzehe ausreiben*... (NHG)
Rub the fondue pot **with** a clove of garlic…

(274) *Sie lagen in 3 großen,* ***mit*** *Balken überdeckten Gruben*... (NHG)
They were lying in 3 large pits which were covered **with** bars…

(275) … *und wieder ein anderer enthielt einen ganzen Bienenkorb aus Wachs*, (NHG)
***mit** feinen wächsernen Blumen verziert*...
… and yet another contained an entire beehive made of wax, adorned **with** delicate waxen flowers…

This frame is a child frame of INSTRUMENT because the FE Material is a more specific entity than Tool which is also used in a tool-like fashion. The FE Action in this frame corresponds to Action in the parent frame.

As seen in some examples evoking the INSTRUMENT frame, in three of the five examples of OHG shown above, the instrumental case ending *-u* appears on the object after *mit*. This may be further evidence that this usage is related to the INSTRUMENT usage.

This usage occurs across all time periods as shown in table 5.21 below

MATERIAL	clear	ambiguous	total
OHG	10	3	13
MHG	27	1	28
ENHG	16	6	22
NHG	4	3	7
total	57	13	70

Table 5.21: MATERIAL data

5.1.4.3 MEANS

Also inheriting from INSTRUMENTAL_CONCOMITANCE is MEANS. The frame elements occurring with *mit* to evoke this frame are Means and Action. The FE Means may be instantiated by either an action such as *guete Wercken, freiem streit,* and *ernstem Kopfnicken* in examples (288), (290), and (291), respectively, or by a resource such as *gotis helfa, sime gelte,* and *dieser finanziellen Leistung* in examples (276), (283), and (293). The FE Action is instantiated by any kind of action, from *er do irstuont fone demo tode* in example (280) to *die Freunde eines guten Tropfens werden bestätigen* in example (291).

In the examples below, the Action is highlighted in teal (light gray if printed in black and white) and the Means is highlighted in purple (dark gray if printed in black and white).

(276) *Daz andere daz sint die uuitiuun, die sih **mit** gotis helfa inziehint dere uuerltlichen vuunne*... (OHG)
The others, they are the widows who, **with** God's help, withdraw from the worldly pleasure…

(277) *Den lon vurht ich sere, wand ich gesundot han* ***mit*** *gedanchin*, ***mit*** *wortin*, ***mit*** *werchin*. (OHG)
The punishment I fear very much, for I had sinned **with** thoughts, **with** words, **with** deeds.

(278) ***Mit*** *sinemo uuistuome scuof unta irlosta er unsih unda screib unsera namen in den himelun*. (OHG)
With his wisdom, he created and saved us and wrote our names in the heavens.

(279) *Suenne unseriu muot imo kilúteret uuerdent* ***mit*** *dera heiligen bredige unte mit demo brunnen dera zahire…* (OHG)
Whenever our souls are purified to him **by means of** the holy sermon and with the fountain of tears…

(280) *… unde er do irstuont fone demo tode*, ***mit*** *sin selbes chrefte…* (OHG)
… and he then rose from the dead **with** his own power…

(281) *Die uorhte benam ir* ***mit*** *disen worten der heilige engel*. (MHG)
The holy angel took away the fear from her **with** these words.

(282) ***Mit*** *sinem ainborn sun hat er uns fride gesendet und urlosunge*. (MHG)
With his only son, he sent us freedom and salvation.

(283) … *da man ein gemachet spitail wolte geuin deme hus* ***mit*** *sime gelte*. (MHG)
… for one wanted to give a built hospital to the house **with** his money.

(284) *… inde reinichit dich nochdandat die sunden* ***mit*** *retheme ruowen inde* ***mit*** *buozen werdent virgeven…* (MHG)
... and [he] cleanses you still so that the sins are forgiven **by means of** just sorrow and **by means of** atonement...

(285) *… also salt du alwege Got bidden dat he* ***mit*** *deme vluoze siner genaden virlezche in dir die hitze…* (MHG)
… so you shall always ask God that he, **by** the flow of his mercy, may put out the heat in you...

(286) *Der wolte ein Tribut entgegen haben / aber seine Raethe waren* ***mit*** *gaben bewegt*. (ENHG)
He wanted to offer/receive a tribute, but his councilors were motivated **with** gifts.

(287) *Vor zeittn warden die Metropoliten, auch die Ertzbischoffe, erwelt* ***mit*** *versamlung der Ertzbischoffen / Bischouen / Abbten / vnnd Priorn der Cloester*... (ENHG)
A long time ago, the metropolitans, also the archbishops, were elected **by means of** an assembly of archbishops, bishops, abbots, and priors of the monasteries…

(288) *Die Apostel lehren / das wir vns bearbeiten sollen / vnsern beruefft* ***mit*** *guete Wercken gewiß machen*. (ENHG)
The apostles teach that we should belabor ourselves [to] make our work known **through** good deeds.

(289) ... *welche vnder vns* ***mit*** *jhrem Gebett Teuffel auß getriben / oder sonst grosse ding gethan haben*. (ENHG)
… which ones among us have driven out the devil or have done other great things **with** their prayer.

(290) ... *dan* ***mit*** *freiem streit wolt er jn erobern*. (ENHG)
… then **by means of** free fight, he wanted to conquer them.

(291) *Zu trocken war es - sehr wahr, werden die Freunde eines guten Tropfens* ***mit*** *ernstem Kopfnicken bestätigen*... (NHG)
Too dry it was – very true, the fans of a good wine will confirm **with** a firm nod…

(292) ... *das sudanesische Volk habe beschlossen, die inneren Probleme* ***mit*** *friedlichen Mitteln zu lösen*. (NHG)
… the Sudenese people decided to solve the internal problems **by** peaceful means.

(293) *Das den jüdischen Mitbürgern zugefügte Leid könne* ***mit*** *dieser finanziellen Leistung zwar nicht ungeschehen gemacht werden*... (NHG)
The suffering inflicted upon the Jewish citizens could indeed not be undone **by means of** this financial payment…

(294) *Sie dient sich den meist sozial schwachen Einwanderern* ***mit*** *Schulen und vielfältigen Hilfsprojekten an.* (NHG)
It offers its services to the most socially feeble immigrants **by means of** schools and various aid projects.

(295) ... *sie begnügt sich* ***mit*** *einem Versteck an der Unterseite des Blattes*. (NHG)
… it contents itself **with** a hiding place on the underside of a leaf.

MEANS is a child frame of INSTRUMENTAL_CONCOMITANCE in that both frame elements correlate to the two frame elements in the parent frame, but one of the FEs, namely Means, is more

specified than its correlate, Aid. Action in the child frame, of course, correlates with Action in the parent frame–both are equally generic.

This usage is the second most frequent usage in the data and occurs in all time periods, as shown in table 5.22 below.

MEANS	clear	ambiguous	total
OHG	28	7	35
MHG	45	28	73
ENHG	38	25	63
NHG	27	13	40
total	138	73	211

Table 5.22: MEANS data

5.1.4.4 MANNER

Also directly related to INSTRUMENTAL_CONCOMITANCE is MANNER. The two frame elements required to occur along with *mit* in order to evoke this frame are Manner and Action. The FE Manner is instantiated in all cases by an emotion or sensation such as *scamu* in example (299), *bittercheide* in (303), and *Empörung* in (313). The FE Action, as is the case in the other frames inheriting from INSTRUMENTAL_CONCOMITANCE, can be instantiated by any type of action, from *iz sprangot imo'n pruston* in example (297) to *die beiden Seiten behandelten die Lage in Nahost* in example (312).

In the examples below, the Action is highlighted in teal (light gray if printed in black and white) and the Manner is highlighted in purple (dark gray if printed in black and white).

(296) *Nu sehen,* ***mit*** *uuelichemo flîzza uuir den gotis uuinkarten ûoben*. (OHG)
Now see **with** which diligence we prepare God's garden.

(297) *Iz sprangot imo'n pruston in euuon* ***mit*** *luston*. (OHG)
It jumps into his breast/heart joyfully (lit: **with** joy) forever.

(298) *... nehein heilic dinc noh christenlih noh gotelih tinc ne han ih so geeret, so ih* ***mit*** *rehta scolta*. (OHG)
… no holy thing, nor Christian, nor divine thing did I honor, as I rightly (lit: **with** right) should have.

(299) *Gib thesomo stat, inti thanne biginnis tu* ***mit*** *scamu thia iungistun stat bihaben*. (OHG)
Give a place to this one and then you begin to seize shamefully (lit: **with** shame) the newest place.

(300) … *inti fuorun uz sliumo fon themo grabe* ***mit*** *forohtu inti* ***mit*** *michilemo giúehen loufente sagen sinen iungoron.* (OHG)
… and [they] quickly came out of the tomb **with** awe and **with** great joy, running to tell his disciples.

(301) *Er sprichet: dienet got* ***mit*** *forhten.* (MHG)
He says, serve God **with** awe/fear.

(302) *Si quit: Wir sulen* ***mit*** *allem ulize tulten…* (MHG)
She says: We should endure very diligently (lit: **with** all diligence)…

(303) *So kuomit ein bitter wazzer uzer dinen ougen inde vluozit up unsen heren inde* ***mit*** *bittercheide kuomit id van dime herzen…* (MHG)
So comes a bitter water out of your eyes and flows upon our Lord and **with** bitterness it comes from your heart…

(304) *Do wart er uunden vnd wart gewiet zv pabiste* ***mt*** *grozen eren.* (MHG)
There he was found and was ordained as Pope **with** great honor.

(305) … *vnd sang er die messe selbe* ***mt*** *grozir inicheit.* (MHG)
… and he sang the mass himself **with** great ardency.

(306) … *pis er dyr das ewig leben* ***mit*** *recht gewunen vnd verdyent hat.* (ENHG)
… until he achieved and earned justly (lit: **with** right) eternal life for you.

(307) … *vnd sing* ***mit*** *jubel.* (ENHG)
… and sing cheerfully (lit: **with** cheer).

(308) *Jch gelaub, wen du* ***mit*** *andacht wurst nysten in dyse hol, du werdest nymer heraus czw gen pegern.* (ENHG)
I believe, if you will dwell in this den **with** devotion, you will never want to go out.

(309) … *damit er das Volgkh richte* ***mit*** *gerechtigkhait.* (ENHG)
… so that he judges the people **with** justice.

(310) … *da er sprach* ***mit*** *begierd…* (ENHG)
… then he spoke **with** desire…

(311) *Die Vertreter der Labour Party nahmen* ***mit*** *viel Verständnis von der Auffassung der SPD Kenntnis, daß…* (NHG)
The representatives of the Labor Party noted **with** much understanding the opinion of the SPD that…

(312) ***Mit*** *besonderer Aufmerksamkeit behandelten die beiden Seiten die Lage in Nahost.* (NHG)
With extraordinary attentiveness, both sides discussed the situation in the Middle East.

(313) *Ich vernehme* ***mit*** *Empörung die entehrende Entscheidung der Nationalen Zensuskommission…* (NHG)
I question **with** disgust the dishonorable decision of the National Census Committee…

(314) *Ich möchte an dieser Stelle* ***mit*** *allem Nachdruck erklären, daß…* (NHG)
I would like to declare at this point most emphatically (lit: **with** all emphasis), that…

(315) *Er kommt uns immer* ***mit*** *geradezu herzlicher Freundschaft entgegen.* (NHG)
He always accommodates us **with** downright heartfelt friendship.

This frame is related to INSTRUMENTAL_CONCOMITANCE via the metaphor MANNER IS AN INSTRUMENT. In this metaphor, MANNER is the target and INSTRUMENT the source, thus the frame element Manner correlates to the FE Aid in INSTRUMENTAL_CONCOMITANCE. Once again, the FE Action in this frame correlates to Action in the mid-level frame.

Unique to this frame is the fact that in most of the translations into English, the *mit* phrase is best translated as an adverbial.

This usage is the third most frequent usage in the data and occurs across all time periods examined, as shown in table 5.23 below.

MANNER	clear	ambiguous	total
OHG	29	6	35
MHG	34	9	43
ENHG	29	21	50
NHG	28	11	39
total	120	47	167

Table 5.23: MANNER data

5.1.4.5 AGENTIVE

Inheriting from MEANS is the AGENTIVE frame. The frame elements which make up this frame and must occur together with *mit* are Action and Agent. The FE Agent can be instantiated by a sentient being, such as *dem heltuom* in example (322), or an emotion that is said to perform an action that only a being may actually perform, such as in *truorecheite* in example (317) and *der*

lyeb der verwunten herczen deines allerlyebsten lyebhaber in example (320). It may also be instantiated by an action that stands metonymically for the person performing the action, such as *der sunden* in example (318). Finally, the FE Agent may also be instantiated by an intangible object such as *vilen Ceremonien* in example (321), *einer Ohrfeige* in (324), and *dem Sternenlicht* in (325). As is the case in all the frames related under INSTRUMENTAL_CONCOMITANCE, the Action may be instantiated by any action, from *zerbrochen* in (317) to *begnügen* in (325).

In the examples below, the Action is highlighted in teal (light gray if printed in black and white) and the Agent is highlighted in purple (dark gray if printed in black and white).

(316) ... *só thaz thaz skef uuard bithekit* ***mit*** *then undon*. (OHG)
… so that the ship was covered **by** the waves.

(317) ... *da mide hei die bedruofden undersezzen sal unde gesterken die da crankes muodes sint unde* ***mit*** *truorecheite zerbrochen*... (MHG)
… so that he shall support the sorrowful and strengthen those who are sick of mind and broken **by** sadness.

Example (317) above also carries an AFFLICTION interpretation whose reading is *those who are broken and possess the negative affliction of sadness*. The AGENTIVE reading, on the other hand, is *those whom sadness has broken*. In the former interpretation, the FE Experiencer is instantiated by *die da* and the Affliction by *truorecheite*.

(318) *Dat naturliche bielde dat* ***mit*** *der sunden virdilijt is*... (MHG)
The natural image that is destroyed **by** the sins…

Example (318) above also carries a MEANS interpretation which reads *the natural image that is destroyed by means of sinning*. The AGENTIVE interpretation, on the other hand, reads *the sins destroyed the natural image*, where *the sins* stand metonymically for the person or people who commit the sins. The FEs in the MEANS interpretation are instantiated as follows: Means as *der sunden* and Action as *dat naturliche bielde dat ist virdilijt*.

(319) *Sein mynigklychs angesicht erplaycht vnd aller sein heylliger, junckfreulycher fronleyb ergylbt vnd erplabt ist* ***mit*** *todes farb*... (ENHG)
Its lovely face is whitened and all its holy, virgin female body yellowed and darkened **by** the color of death…

(320) ... *das dein hercz gancz verwunt werd* ***mit*** *der lyeb der verwunten herczen deines allerlyebsten lyebhabers*. (ENHG)
… that your heart is wounded **by** the love of the wounded heart of your most dear lover.

(321) *... vnd daß das Christliche Volck nicht* ***mit*** *vilen Ceremonien vber haufft oder beschwaert / vnnd darbey das nothwendige vnderlassen werde.* (ENHG)
… and that the Christian folk may not become overwhelmed or weighed down **by** many ceremonies and thereby neglect the necessary.

Example (321) above also carries a CAUSE interpretation (a child frame of AGENTIVE), which reads *the Christain folk may not become overwhelmed or weighed down because of many ceremonies*. In this case, the FE Cause is instantiated by *vilen Ceremonien* and Effect by *das Christliche Volke werde nicht vber haufft oder beschwert*.

(322) *... kam hertzog albrecht in geritten gon Rinfelden, wart* ***mit*** *dem heltuom erlichen enpfange...* (ENHG)
… Herzog Albrecht came, riding to them toward Rinfeld, was greeted sincerely **by** the host…

(323) *Jst dann jhr Glauben new / so muß er entweder* ***mit*** *Himmlischen Zeichen bewiesen werden...* (ENHG)
If then her/their belief new, then it must either be proven **with** heavenly signs…

(324) *Und ich werde mich dann natürlich nicht* ***mit*** *einer Ohrfeige begnügen...* (NHG)
And I will naturally not be content **with** a slap…

(325) *Es wurde ziemlich finster, wir hatten keinen Mond und mußten uns* ***mit*** *dem Sternenlicht begnügen.* (NHG)
It became quite dark, we had no moon and had to be content **with** the starlight.

Examples (324) and (325) above, like example (318), carry a MEANS interpretation as well. The FE Means is instantiated by *einer Ohrfeige* and *dem Sternenlicht* in (324) and (325), respectively, and Action is instantiated by *ich werde mich dann natürlich nicht begnügen* and *wir mußten uns begnügen* in (324) and (325), respectively.

This frame is a child frame of MEANS in that the FE Agent is a more specific correlate of the FE Means. Supporting this proposed relationship is the fact that five of the eleven examples which evoke this frame are ambiguous between the MEANS and the AGENTIVE interpretations, while Means is the more established meaning due to its frequency compared to the frequency of AGENTIVE in the data. This suggests that the AGENTIVE meaning may be in the process of entering into Traugott and Dasher's stage II (coded) meaning. Once again, the FE Action in this frame corresponds to Action in the parent frame.

As suggested by the name of the frame, utterances which evoke this frame often reflect passive voice.

As shown in table 5.24 below, this usage appears across all time periods, though not very frequently in any period in particular.

AGENTIVE	clear	ambiguous	total
OHG	1	0	1
MHG	0	2	2
ENHG	2	4	6
NHG	0	2	2
total	3	8	11

Table 5.24: AGENTIVE data

5.1.4.6 CAUSE

Also related directly to MEANS is the CAUSE frame. The frame elements occurring together with *mit* to evoke this frame are Cause and Effect. The FE Cause may be instantiated by an action, such as *ainem schlage* in example (328), *erweiterung seiner herrschafft* in example (334), and *dem weit früheren Eindringen deutscher Fernhändler in das Land* in example (337). This FE may also be instantiated by an emotion or feeling such as *dinem ganadon* in (326) or *forchten* in (333), (exceptions to this are discussed in the relevant examples below). The FE Effect is instantiated by any type of resultative action, from *mer leme geschiht* in example (328) to *der Typ des Laienhandwerks entstand* in (336).

In the examples below, the Effect is highlighted in teal (light gray if printed in black and white) and the Cause is highlighted in purple (dark gray if printed in black and white).

(326) *... uzzan soso uuir **mit** dinera anst enti **mit** dinem ganadon ubar uuehan mekin.* (OHG)
... without thusly us being able to overcome **by** your goodwill and **by** your grace.

(327) *... uzzan so uilu so uuir **mit** dineru ensti upærqhueman megin.* (OHG)
… without as much as we may be able to overcome **by** your grace.

Examples (326) and (327) both carry a MEANS interpretation alongside a CAUSE interpretation. It is unclear whether the author(s) intended to focus on the Means of the action or the Cause of the action with their use of *mit*. The FE Means instantiated in the MEANS reading are *dinera anst* and *dinem ganadon* in (326) and *dineru ensti* in (327). The FE Action is instantiated by *uuir mekin ubar uuehan* and *uuir megin upærqhueman*, in (326) and (327), respectively.

(328) *Vnd ob mer leme **mit** ainem schlage / geschiht an ainen arm oder an ainem fvoze...* (MHG)
And if more lameness occurs **by** a strike on an arm or on a foot…

Example (328) above also carries a MEANS reading in which the FE Means is instantiated by *ainem schlage an ainen arm oder an ainem fvoze* and Action by *mer leme geschiht*.

(329) *Geschehen aber zwo leme* ***mit*** *ainen schlage an baiden armen an baiden handen an baiden fvozen oder an baiden pain*... (MHG)
If, however, two lamenesses occur **by** a blow on both arms, on both hands, on both feet, or on both legs…

Like example (328), example (329) above also carries a MEANS reading in which the FE Means is instantiated by *ainen schlage an baiden armen an baiden handen an baiden fvozen oder an baiden pain* and Action by *zwo leme geschehen*.

(330) *Daz er ersten solde von me tode vnd vns alle* ***mit*** *siner heiligen vferstandunge solde irledigen*. (MHG)
That he should have risen from death and should have freed us **with** his holy resurrection.

Example (330) above also has a MEANS interpretation in which the FE Means is instantiated by *siner heiligen vferstandunge* and the FE Action as *er solde vns alle irledigen*.

(331) *Da mohte der landescomeduer* ***mit*** *deme raite der wizegestin bruodre dat niman oder lazen*. (MHG)
Then the land-commodore might take or leave that **with** the advice of the wisest brothers.

Like some of the previous examples above, example (331) also carries a MEANS interpretation in which *deme raite der wizegestin bruodre* instantiates the FE Means and *der landescomeduer mohte dat niman oder lazen* instantiates the FE Action.

(332) *So mach man uan der uerlihunge der priuileigin des ordenes* ***mit*** *sunderlicheme urloue des meisteres oue des lantcomdures bittere der almvosen, den siechen uiz senden* (MHG)
Thusly may one by the allowance of the privileges of the order **with** special permission of the master or the land-commodore send out to those seeking alms, to the sick ones…

Example (332) carries a MEANS reading as well in which *sunderlicheme urloue des meisteres oue des lantcomdures* instantiates the FE Means and *so mach man* instantiates the FE Action.

(333) *Seine Gest seind in der zeit* ***mit*** *forchten still gewest*. (ENHG)
His guests were at that time silent **with/out of** fear.

(334) *... damit in seinen tagen die gerechtigkhait erscheine* ***mit*** *erweiterung seiner herrschafft*. (ENHG)
… so that in his days, justice may manifest **with/because of** expansion of his reign.

Example (334) above is contextually ambiguous between CAUSE and CONCURRENCE. In the CAUSE interpretation, the sentence indicates *justice may manifest because of the expansion of his reign*. The CONCURRENCE reading, on the other hand, indicates that *justice may manifest at the same time as his reign expands*. In the latter case the FE Occurrence is instantiated as *die gerechtigkhait erscheine* and the FE Co-occurrence as *erweiterung seiner herrschafft*.

(335) *... vnd daß das Christliche Volck nicht **mit** vilen Ceremonien vber haufft oder beschwaert / vnnd darbey das nothwendige vnderlassen werde.* (ENHG)
… and that the Christian folk may not become overwhelmed or weighed down **by/because of** many ceremonies and thereby neglect the necessary.

Example (335) above may, like many others, carry a MEANS interpretation in which *vilen Ceremonien* instantiates the FE Means and *das Christliche Volck werde nicht vber haufft oder beschwart* instantiates the FE Action.

(336) ***Mit** den Städten entstand der Typ des Laienhandwerks...* (NHG)
With the cities, the type/guy of layman's craft came into existence…

Example (336), like (334) is contextually ambiguous between CAUSE and CONCURRENCE. The CAUSE interpretation reads *because of the [emergence] of the cities, the type/guy of layman's craft came into existence*; whereas the CONCURRENCE interpretation reads *at the same time that the cities emerged, the type/guy of layman's craft emerged*. In the latter interpretation, the FE Occurrence is instantiated by *der Type des Laienhandwerks entstand* and the FE Co-occurrence by *den Städten*.

(337) *Zum Schluß verweist er darauf, daß der deutsche Einfluß auf die werdenden Städte in Ungarn nicht **mit** den ersten Stadtprivilegien, sondern **mit** dem weit früheren Eindringen deutscher Fernhändler in das Land beginnt.* (NHG)
Finally, he indicates that the German influence on the emergent cities in Hungary began not **with** the first town privileges, but rather **with** the much earlier infiltration of German merchants into the country.

Example (337) above is also contextually ambiguous between a CAUSE reading and a CONCURRENCE reading. The CAUSE interpretation reads *the German influence on the emergent cities in Hungary began not because of the first town privileges, but rather because of the earlier infiltration of German merchants*. The CONCURRENCE interpretation, on the other hand, reads *the German influence on the emergent cities in Hungary began not at the same time as the first town privileges, but rather at the same time as the infiltration of German merchants.* In the latter interpretation, *der deutsche Einfluß auf die werdenden Städte in Ungarn beginnt* instantiates the FE Occurrence and *den ersten Stadtprivilegien* and *dem weit früheren Eindringen deutscher Fernhändler in das Land* instantiate the FE Co-occurrence.

(338) *Weil das Großhirn sich erst vor kurzem entwickelt hat und anatomisch recht homogen gebaut ist, nur wenige Zelltypen enthält und* ***mit*** *standardmäßigen Verbindungsmustern auskommt…* (NHG)
Because the cerebrum just recently developed and is constructed anatomically quite homogenously, contains only few cell types and makes due **with/on** standard connection patterns…

As is the case with many previous examples, example (338) above carries a MEANS reading in which the FE Means is instantiated by *standardmäßigen Verbindungsmustern* and Action by *das Großhirn auskommt*.

(339) ***Mit*** *der Entwicklung der visuellen Sinneswahrnehmung und des Auges als Distanzrezeptor engstens verbunden, ist der F. nicht nur Produkt der biolog., sondern auch der sozialen Entwicklung des Menschen.* (NHG)
With the development of the visual sensory perception and of the eye as distance-receptor closely related, the F. is not only the product of biological but rather also [the product] of the social development of man.[104]

(340) *Die drei Beteiligten seien sich darin einig gewesen, den Sachverhalt* ***mit*** *Rücksicht auf den König und die Münchener Öffentlichkeit vorläufig geheim zu halten…* (NHG)
The three participants were agreed to temporarily keep the matter secret for now **with/because of** consideration for the King and the Munich public...

This frame is related to MEANS via a resultative relationship in which the FE Cause correlates to the FE Means as it is a result of the Means. The FE Effect is merely a more specified correlate of Action.

As shown in table 5.25 below, this usage is found across all examined time periods; however, in MHG and OHG all examples found in the data are ambiguous. In ENHG there is one unambiguous example and in NHG there are five unambiguous examples. This may indicate that this usage is currently entering Traugott & Dasher's Stage II (coded) meaning.

[104] This example is a bit more complex than the rest of the examples found in the data that evoke the CAUSE frame. It seems that it is not just the preposition *mit* and the instantiated frame elements which evoke the frame, but perhaps the construction itself in connection with *mit* and its instantiated FEs. If we reverse the the order of the two clauses so that the sentence reads *Der F. ist nicht nur Produkt der biolog., sondern auch der sozialen Entwicklung des Menschen, mit der Entwicklung der visuellen Sinneswahrnehmung und des Auges als Distanzrezeptor engstens verbunden*, the causal sense is lost. This may indicate that this is an emerging sense of *mit* which may be paraphrased as *mit dem Wissen, dass* ('with the knowledge that'), or something to that effect. To confirm this hypothesis, however, we would need to find more corpus examples of this particular usage.

CAUSE	clear	ambiguous	total
OHG	0	2	2
MHG	0	10	10
ENHG	1	2	3
NHG	5	10	15
total	6	24	30

Table 5.25: CAUSE data

This concludes the presentation of the frames evoked by *mit* in the data collected and examined. The next section contains visual representations of the diachronic and synchronic polysemy networks along with relevant observations about these networks.

5.2 Polysemy networks

The frames discussed above have been mapped into a network headed by the top-level, non-lexical frame CONCOMITANCE. Figure 5.5 below depicts a visual representation of the entire diachronic polysemy network of *mit*. The four figures following this are synchronic polysemy network diagrams for each of the four time periods examined. Because the specifics of the frame-to-frame relationships have been discussed in the sections above, I will not go into details of the relationships here. Appendix B, however, includes a table which serves as a quick reference guide to frame-to-frame relations.

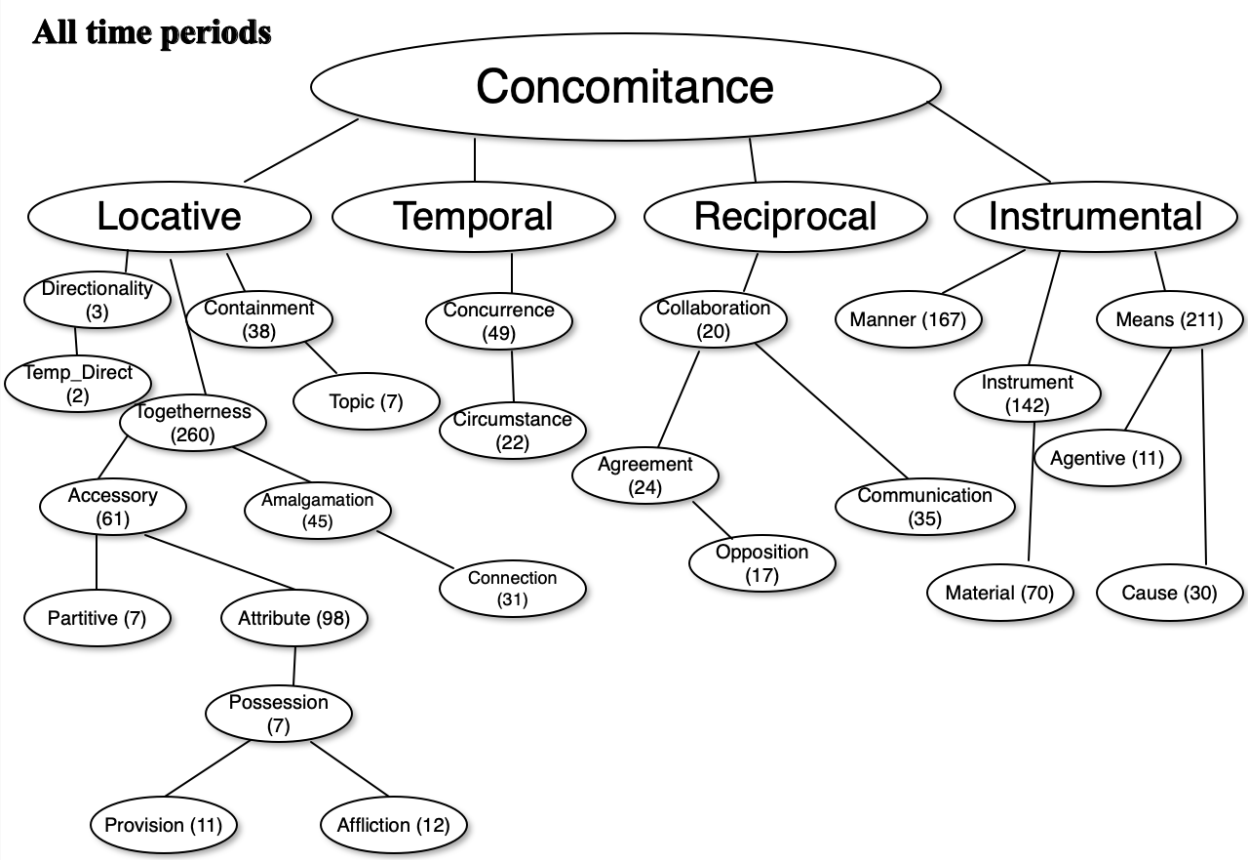


Figure 5.5: Diachronic polysemy network of German *mit*

As stated above, figure 5.5 above depicts the entire diachronic polysemy network of the German preposition *mit*. After each frame name is a number in parentheses. This is the number of times the frame was evoked in the entirety of the data, including instances of ambiguity. I have added the numbers into this diagram, as there are a few interesting observations to make about these. Again, though this study should not be seen as exhaustive, there appear to be a few patterns emerging from this data. First and foremost is the fact that, in most cases, the further down on the inheritance tree, the much smaller the number of instances in the data. Paths that follow this pattern completely are shown below:

TOGETHERNESS (260) → AMALGAMATION (45) → CONNECTION (31)
TOGETHERNESS (260) → ACCESSORY (61) → PARTITIVE (7)
ATTRIBUTE (98) → POSSESSION (7)
CONCURRENCE (49) → CIRCUMSTANCE (22)
AGREEMENT (24) → OPPOSITION (17)
INSTRUMENT (142) → MATERIAL (70)
MEANS (211) → AGENTIVE (11)
MEANS (211) → CAUSE (30)

This pattern is logical, as the frames that inherit directly from the mid-level frames (LOCATIVE_CONCOMITANCE, TEMPORAL_CONCOMITANCE, RECIPROCAL_CONCOMITANCE, and INSTRUMENTAL_CONCOMITANCE) are most likely the most established usages, while the frames

that occur further down on the tree have undergone the most semantic change throughout the four time periods examined.

There are five exceptions to this pattern, i.e. five instances in which the frame that is further down the tree has been evoked more times in the data than the frame from which it stems. These paths are the following:

ACCESSORY (61) → ATTRIBUTE (98)
POSSESSION (7) → PROVISION (11)
POSSESSION (7) → AFFLICTION (12)
COLLABORATION (20) → AGREEMENT (24)
COLLABORATION (20) → COMMUNICATION_EXCHANGE (35)

The first path listed above, ACCESSORY → ATTRIBUTE is the most concerning, as there is a 37 example difference between the two frames. It could be the case that the proposed polysemy network may need to be rethought. We could propose, for instance, that perhaps the ATTRIBUTE frame should actually stem from TOGETHERNESS rather than ACCESSORY. The problem with this latter proposal, however, is that the relationship between the frame elements of ACCESSORY (Bearer and Accessory) and ATTRIBUTE (Being/Entity and Attribute) seem to hold a more logical relationship than the FEs of TOGETHERNESS (Party and Co-Party) and ATTRIBUTE (Being/Entity and Attribute). This may be a case in which there could be multiple plausible frame relations that could be proposed. In order to determine which one is the "correct" one, a further study focusing on this branch specifically (with more data) is required.

The rest of the paths listed above are not particularly concerning due to both the relatively small amount of data and the nature of the texts included in the corpora. The difference between POSSESSION and PROVISION is only 4, between POSSESSION and AFFLICTION is only 5, and between COLLABORATION and COMMUNICATION_EXCHANGE is only 4. There is a larger difference (15) between the number of evocations of COLLABORATION and COMMUNICATION_EXCHANGE, which may require further examination in order to determine with certainty the reason for this; however, the difference is still rather small and could simply be due to the nature of the texts, as many of the texts seem to be recounting tales in which there is a lot of X speaking with Y. Again, a further study focused on the relationship between these two frames would need to be undertaken to come to a definitive conclusion.

Another point of interest with regard to figure 5.5 above is the fact that the branch of LOCATIVE_CONCOMITANCE shows the most branching underneath the mid-level frame. This may be due to the fact that humans conceptualize many abstract notions in terms of their experiences and location at the core of human experience. Additionally, most of the frames in this branch reflect tangible objects, with the exception of TEMPORAL_DIRECTIONALITY, AFFLICTION, ATTRIBUTE (in some cases), CONNECTION (in most cases), and TOPIC.

An additional observation worth note is that aside from TOGETHERNESS, the three frames which inherit directly from INSTRUMENTAL_CONCOMITANCE, namely MEANS, MANNER, and INSTRUMENT, occur most frequently in the data with 211, 167, and 142 occurrences, respectively.

Table 5.26 below shows the frequency of frames evoked across all periods examined; however, this table should be interpreted with caution for two reasons: First, this study is fairly small, that is, there are not enough examples to conclude with certainty that one usage was in fact more frequent than another. Second, due to the nature of the texts in the corpora, some frames may be evoked more or less frequently than they actually are (or were, as the case may be).

Frame	**OHG**	**MHG**	**ENHG**	**NHG**	**total**
TOGETHERNESS	135	55	45	25	260
MEANS	35	73	63	40	211
MANNER	35	43	50	39	167
INSTRUMENT	42	28	46	26	142
ATTRIBUTE	7	24	23	44	98
MATERIAL	13	28	22	7	70
ACCESSORY	7	20	28	6	61
CONCURRENCE	7	10	13	19	49
AMALGAMATION	2	37	3	3	45
CONTAINMENT	4	4	12	18	38
COMMUNICATION_EXCHANGE	9	0	12	14	35
CONNECTION	0	1	1	29	31
CAUSE	2	10	3	15	30
AGREEMENT	3	2	3	16	24
CIRCUMSTANCE	6	1	4	11	22
COLLABORATION	7	4	6	3	20
OPPOSITION	2	1	6	8	17
AFFLICTION	4	6	1	1	12
AGENTIVE	1	2	6	2	11
PROVISION	2	1	4	4	11
PARTITIVE	0	1	2	4	7
POSSESSION	1	1	0	5	7
TOPIC	1	0	3	3	7
DIRECTIONALITY	1	0	2	0	3
TEMPORAL_DIRECTIONALITY	0	0	0	2	2

Table 5.26: Frequency of evocations of frames across all periods from highest to lowest

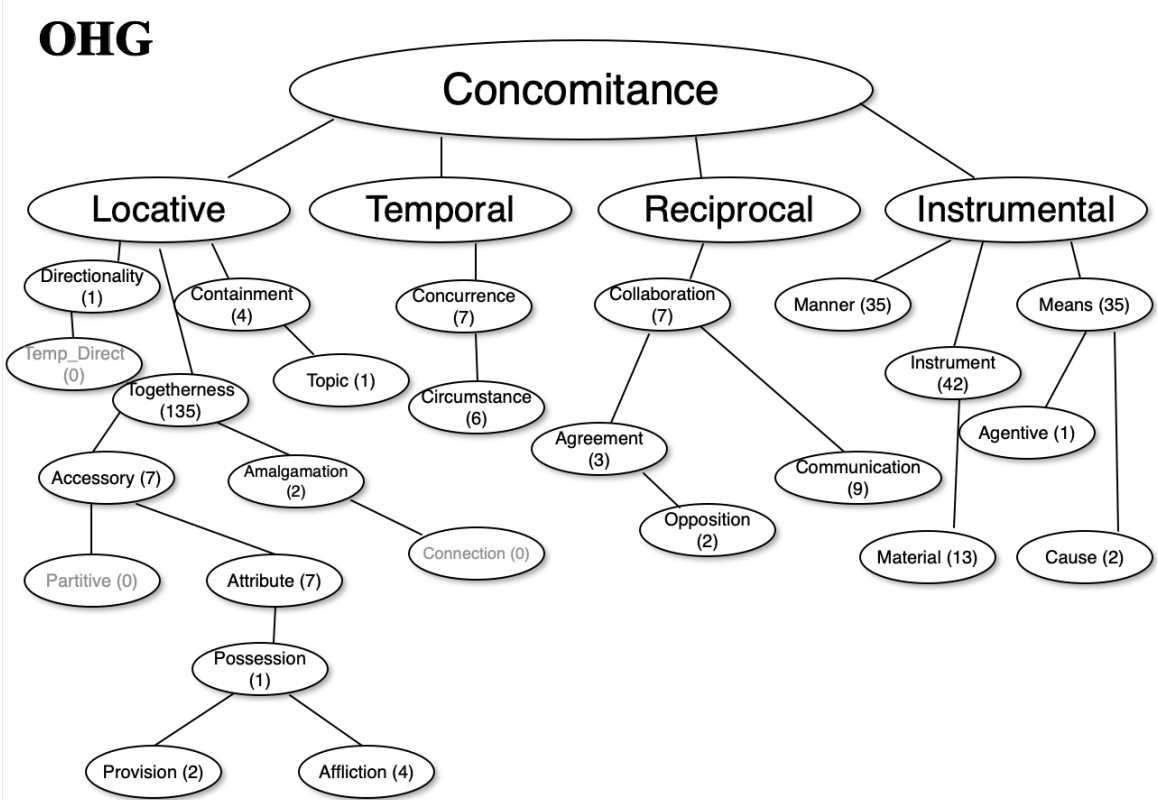


Figure 5.6: Polysemy network of German *mit* in OHG

Figure 5.6 above depicts the (synchronic) Old High German polysemy network of *mit*. As the reader may note, excluding the differing numbers, this figure is identical to figure 5.5 with the exception of the faded appearance of three frames (indicating their lack of appearance in the data), namely TEMPORAL_DIRECTIONALITY, PARTITIVE, and CONNECTION. These three frames did not appear in the data collected, thus appear in gray in the figure above. Again, this is not to say that these frames were not evoked by *mit* in the OHG time period, however they did not occur in the 297 examples of OHG *mit* collected for this study. It is, however, not surprising that it would be these three frames that did not occur in the data, for they are all terminal frames within the complete network shown in figure 5.5. This means that their meaning had to evolve more than the frames depicted higher up in the figure. With regard to TEMPORAL_DIRECTIONALITY, despite the fact that this is relatively high up in the figure, it is unsurprising that it did not appear in the OHG data because its parent frame, DIRECTIONALITY, only occurred three times across all time periods. This very small number indicates that this usage is most likely not a very frequent usage of *mit*, which could indicate that any frame stemming from DIRECTIONALITY is probably also not frequently used. Thus, in turn, if a particular usage of a word is not used frequently, it is unlikely that its meaning will evolve into a new meaning. It may be the case, however, that *mit* was not used to evoke the TEMPORAL_DIRECTIONALITY frame at this point in time, as this frame is not evoked in the data until the New High German time period. Nevertheless, more data is required in order to confirm this.

Table 5.27 below shows the frequency of frames evoked in the Old High German data. Again, this table should be interpreted with caution for the reasons noted above.

Frame	**OHG**
TOGETHERNESS	135
INSTRUMENT	42
MANNER	35
MEANS	35
MATERIAL	13
COMMUNICATION_EXCHANGE	9
ACCESSORY	7
ATTRIBUTE	7
COLLABORATION	7
CONCURRENCE	7
CIRCUMSTANCE	6
AFFLICTION	4
CONTAINMENT	4
AGREEMENT	3
AMALGAMATION	2
CAUSE	2
OPPOSITION	2
PROVISION	2
AGENTIVE	1
DIRECTIONALITY	1
POSSESSION	1
TOPIC	1
CONNECTION	0
PARTITIVE	0
TEMPORAL_DIRECTIONALITY	0

Table 5.27: Frequency of evocation of frames in OHG

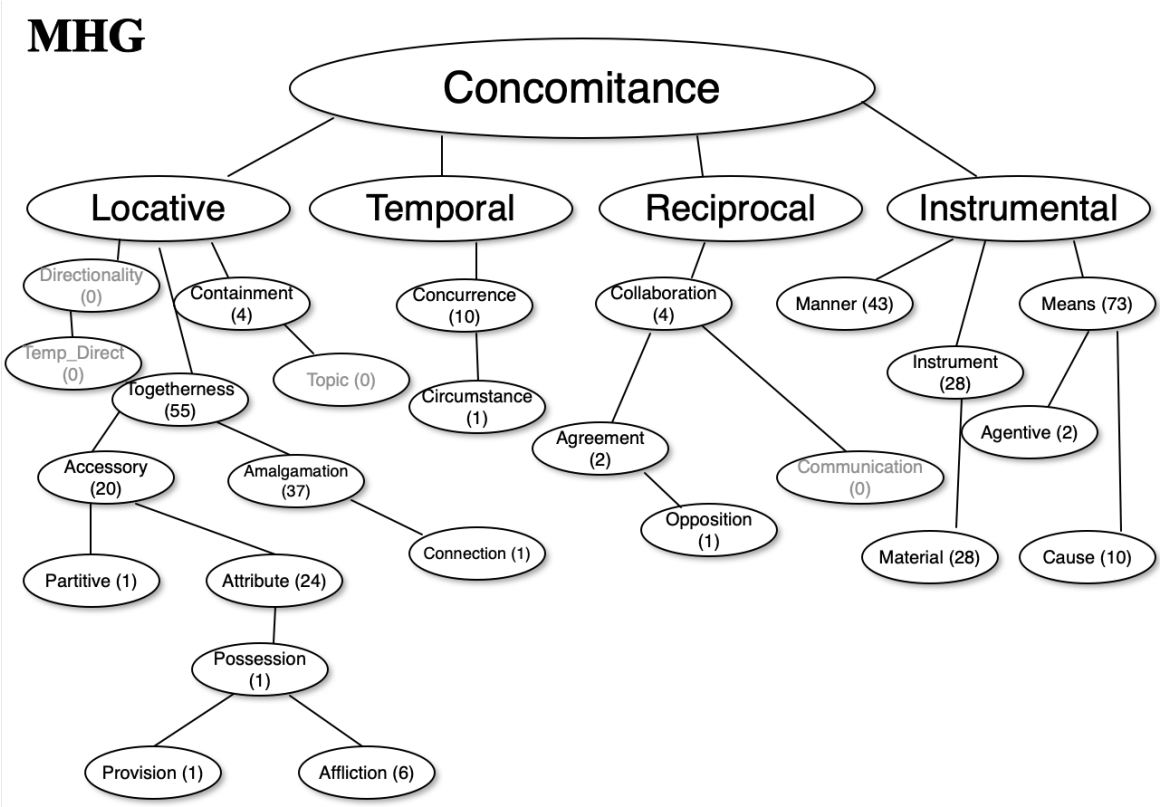


Figure 5.7: Polysemy network of German *mit* in MHG

Figure 5.7 above depicts the (synchronic) Middle High German polysemy network of *mit*. Again, excluding the differing numbers, this frame is identical to figure 5.5, but this time with the faded appearance of four frames, DIRECTIONALITY, TEMPORAL_DIRECTIONALITY, TOPIC, and COMMUNICATION_EXCHANGE. As discussed above, the lack of TEMPORAL_DIRECTIONALITY is not surprising due to the fact that it stems from a frame whose usage is very minimal across all time periods examined. It is even more expected that this frame would not appear in the MHG data because the frame it relates to directly, DIRECTIONALITY, also does not appear in the data for this period. I am not claiming, however, that the usage of *mit* that evokes DIRECTIONALITY did not exist in this time period. On the contrary, because it existed in the time periods before and after it (OHG and ENHG), it most likely did exist, but with little frequency. Whether or not TEMPORAL_DIRECTIONALITY, on the other hand, actually existed in the MHG time period is unclear, as it does not appear in the data until the NHG period.

The absence of evocation of the frame TOPIC is equally unsurprising due to the lack of frequency in the data across all time periods. This frame was evoked by *mit* once in the OHG period and three times in the ENHG period, so it is likely that it existed in the MHG period as well, but again, probably with low frequency.

The absence of COMMUNICATION_EXCHANGE, however, is rather odd. It no doubt existed in the MHG period, as it occurred nine times in the OHG data and 12 in the ENHG data. This proves that this study is not exhaustive, as the COMMUNICATION_EXCHANGE frame is shown to be

thriving across all other time periods (14 examples in NHG in addition to the examples mentioned previously).

Table 5.28 below shows the frequency of frames evoked in the Middle High German data. Once again, this table should be interpreted with caution for the reasons noted above.

Frame	**MHG**
MEANS	73
TOGETHERNESS	55
MANNER	43
AMALGAMATION	37
INSTRUMENT	28
MATERIAL	28
ATTRIBUTE	24
ACCESSORY	20
CAUSE	10
CONCURRENCE	10
AFFLICTION	6
COLLABORATION	4
CONTAINMENT	4
AGENTIVE	2
AGREEMENT	2
CIRCUMSTANCE	1
CONNECTION	1
OPPOSITION	1
PARTITIVE	1
POSSESSION	1
PROVISION	1
COMMUNICATION_EXCHANGE	0
DIRECTIONALITY	0
TEMPORAL_DIRECTIONALITY	0
TOPIC	0

Table 5.28: Frequency of evocation of frames in MHG

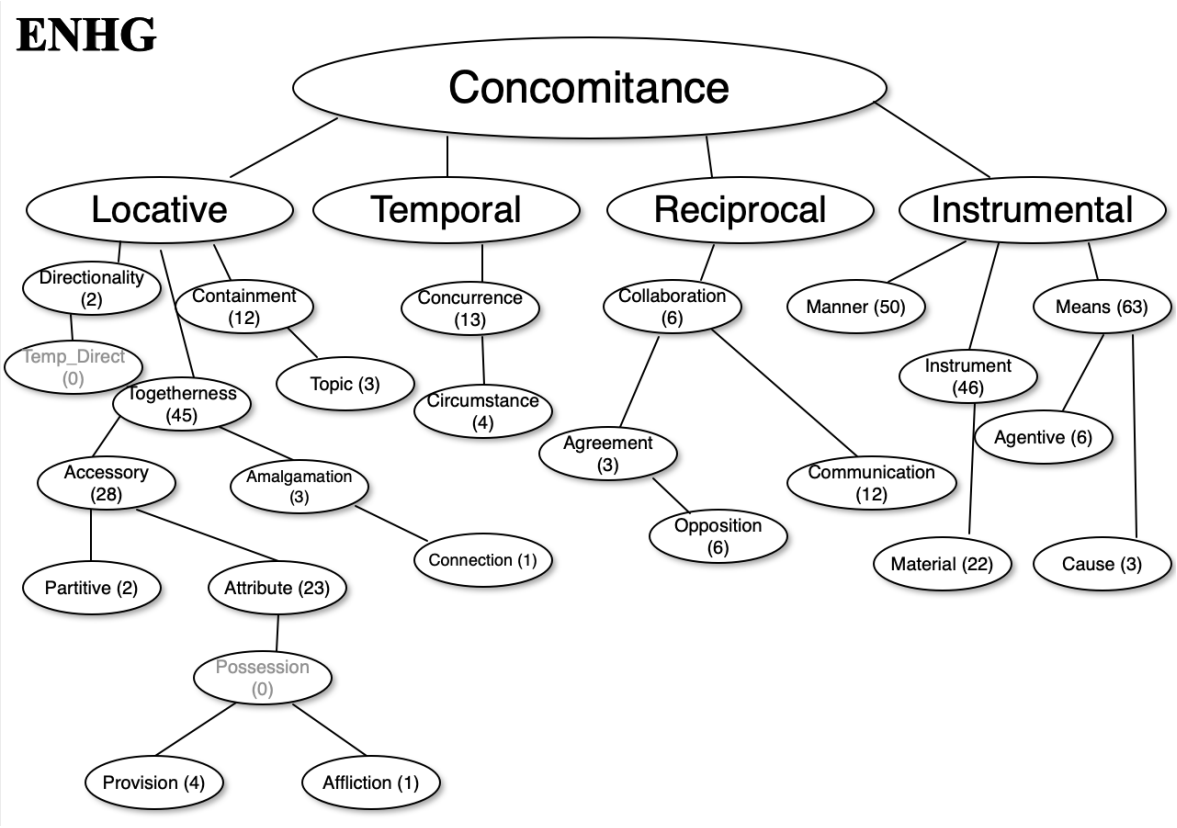


Figure 5.8: Polysemy network of German *mit* in ENHG

Figure 5.8 above depicts the Early New High German synchronic polysemy network of *mit*. Once again, excluding the differing numbers, this frame is identical to figure 5.5, but this time with the faded appearance of two frames, namely (once again!) TEMPORAL_DIRECTIONALITY and PROVISION. The lack of appearance of TEMPORAL_DIRECTIONALITY is not surprising due to the reasons explained above. Again, it could be the case that this usage did not exist until the NHG time period, but one would need more data in order to substantiate this claim.

The POSSESSION frame also did not appear in the ENHG data collected. It does, however, appear in both the MHG and NHG time periods (once and five times, respectively). It is also a necessary link to connect PROVISION and AFFLICTION to the rest of the polysemy network. The fact that the POSSESSION usage appears in the time periods surrounding ENHG indicates that this usage of *mit* probably does occur in this time period, but did not show up in the data. This is unremarkable, as this frame is only evoked seven times in the data throughout all time periods.

Table 5.29 below shows the frequency of frames evoked in the Early New High German data. Again, interpret with caution for the reasons noted above.

Frame	ENHG
MEANS	63
MANNER	50
INSTRUMENT	46
TOGETHERNESS	45
ACCESSORY	28
ATTRIBUTE	23
MATERIAL	22
CONCURRENCE	13
COMMUNICATION_EXCHANGE	12
CONTAINMENT	12
AGENTIVE	6
COLLABORATION	6
OPPOSITION	6
CIRCUMSTANCE	4
PROVISION	4
AGREEMENT	3
AMALGAMATION	3
CAUSE	3
TOPIC	3
DIRECTIONALITY	2
PARTITIVE	2
AFFLICTION	1
CONNECTION	1
POSSESSION	0
TEMPORAL_DIRECTIONALITY	0

Table 5.29: Frequency of evocation of frames in ENHG

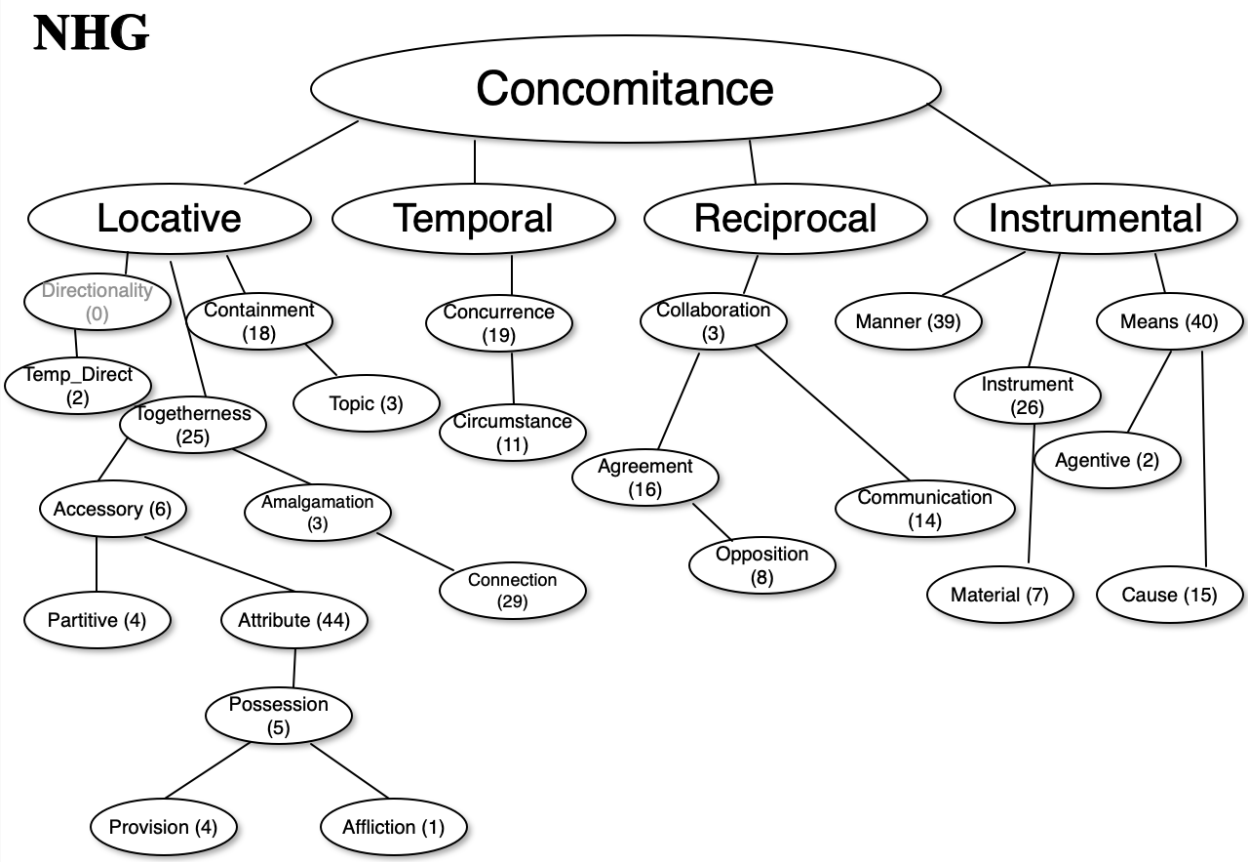


Figure 5.9: Polysemy network of German *mit* in NHG

Lastly, figure 5.9 above depicts the New High German synchronic polysemy network of *mit*. Once again, excluding the differing numbers, this frame is identical to figure 5.5, with the exception of the light-colored text on the frame DIRECTIONALITY.Tthis usage does not show up in the data examined, but it does exist in NHG, as in phrases such as *mit dem Strömung rudern* ('to row with the current'). Additionally, TEMPORAL_DIRECTIONALITY directly relates to this usage (metaphorically), thus it is a necessary link in this polysemy network.

Table 5.30 below shows the frequency of frames evoked in the New High German data. These numbers are to be interpreted with caution due to the small scale nature of the study and the nature of the texts included in the corpora.

Frame	NHG
ATTRIBUTE	44
MEANS	40
MANNER	39
CONNECTION	29
INSTRUMENT	26
TOGETHERNESS	25
CONCURRENCE	19
CONTAINMENT	18
AGREEMENT	16
CAUSE	15
COMMUNICATION_EXCHANGE	14
CIRCUMSTANCE	11
OPPOSITION	8
MATERIAL	7
ACCESSORY	6
POSSESSION	5
PARTITIVE	4
PROVISION	4
AMALGAMATION	3
COLLABORATION	3
TOPIC	3
AGENTIVE	2
TEMPORAL_DIRECTIONALITY	2
AFFLICTION	1
DIRECTIONALITY	0

Table 5.30: Frequency of evocation of frames in NHG

Examining the four synchronic polysemy networks together, we can see that *mit* has not lost any of the meanings shown in the OHG, but it has most likely gained three meanings (TEMPORAL_DIRECTIONALITY, PARTITIVE, and CONNECTION) since the oldest examined time period. Though this may not seem like a significant gain, it does indicate that prepositions not only carry semantic load, but that the semantic load can also change over time, as is the case among the so-called content words, such as nouns, verbs, and adjectives.

This concludes the discussion of the polysemy networks. The next section discusses three different authoritative works which include at least some reference to the multiple meanings of the German preposition *mit* and compares these meanings to the findings in this dissertation.

5.3 Treatment of NHG *mit* in selected authoritative works

While there are a number of so-called authoritative works which touch on usages of (modern) German prepositions, many of them–with the exception of *Lexicon deutscher Präpositionen* (Schröder 1990)–do not go into great depth on the semantics of the word. Duden's *Stilwörterbuch* shows the most frequent usages of the word in a lexical field type manner, i.e. which words *mit* frequently appears with (*Stilwörterbuch*: 545–546); *Grammatik der deutschen Sprache* (Zifonun, Hoffmann & Strecker 1997: 2135–2149) discuss the semantics relatively in depth, but use a syntactic framework, i.e., main headings are labeled with a syntactic focus, such as "*mit* bei Adverbialia in Supplementfunktion" (Zifonun, Hoffmann & Strecker: 2135) and "*mit* bei Komplementen" (Zifonun, Hoffmann & Strecker: 2141).

It is relevant, however, to briefly discuss some of these works in order to show how the semantics of *mit* have traditionally been described. This will also give the reader a comparison to the analysis presented in this dissertation. In the following subsections, I discuss the way in which each of the following works portrays the semantics of the (New High) German preposition *mit*: *Deutsche Grammatik: Ein Handbuch für den Ausländerunterricht* (Heibig & Buscha 1996), *Duden Onlinewörterbuch* (Duden), and *Lexicon deutscher Präpositionen* (Schröder 1990).[105] The order of the discussion of the first three works proceeds from least to greatest detail.

5.3.1: *Deutsche Grammatik: Ein Handbuch für den Ausländerunterricht* (Heibig & Buscha 1996)

This work, as is characteristic of traditional grammars, focuses on the basics of German syntax, i.e. verb conjugation, verb tense, mood, adjective declension, noun gender, case, etc., but it does also dedicate a bit of space (Heibig & Buscha 1996: 432–433) to the semantics of the particular syntactic class under discussion. The section on prepositions begins with a short statement about prepositions (as function words) being classified as *Fügewörter*, a term which is usually translated as 'conjunctions'; however the authors use this term more broadly to include all function words that connect words, phrases, or clauses to one another to form a unified whole. In this section, they also state, however, that not all words classified as so-called *Fügewörter* have unambiguous semantics (Heibig & Buscha: 401).

The discussion then proceeds to the topics of sentential positioning of prepositions, case government, and finally any particularities about a group of or an individual preposition(s). After this comes the semantic description. This subsection opens with the statement that basically says that prepositional phrases can form five different types of relations within a sentence: adverbial, objective, attributive with adverbial relation, attributive with object relation, or subjective relation. The authors then separate the prepositions into various categorizations, such as modal, temporal, spatial, etc. Finally, they provide an alphabetical list of all the NHG prepositions and their usages. I have created a table (table 5.31 below) to summarize the authors' entry for *mit* (Heibig & Buscha 1996: 433–434):

[105] To my knowledge, other than the Grimm brothers' dictionary, there are no works like the ones discussed in this section which include historical uses of *mit*.

classification	author's comments	examples
1. Modal	1.1 instrumental (by means of); antonym: *ohne*	a. *Sie schreibt den Brief mit der Schreibmaschine.* b. *Er ist mit dem Abendzug gekommen.* c. *Mit wenigen Worten hat er die Situation charakterisiert.*
	1.2 accompanying circumstance; before substantives with obligatory or optional attribute; antonym: *ohne*	No examples given.
	1.2.1 with obligatory attribute; before substantives like *Lärm, Geschwindigkeit, Schritte, Aufwand* (objectively measurable)	a. *Mit hoher Geschwindigkeit fuhr der Zug über die Brücke.* b. *Mit großen Schritten eilte er nach Hause.*
	1.2.2 with optional attribute; before substantives like *Dank, Interesse, Freude, Bedauern* (subjective)	a. *Mit (großem) Interesse verfolgten sie das Spiel.*
	1.2.3 before people and not-people (except for abstract nouns)	a. *Die Schüler gehen mit ihrem Lehrer ins Theater.* b. *Der Arzt geht mit aufgespanntem Regenschirm spazieren.*
2. Temporal	concurrency, point in time; also before information about age	a. *Mit dem Startschuß setzten sich die Läufer in Bewegung.* (= *als der Startschuß ertönte*) b. *In vielen Ländern kommen die Kinder mit sechs Jahren in die Schule.*
3. Conditional	not with indicative mood in the past tense	a. *Mit etwas Glück kann er die Prüfung schaffen.* (= *wenn er etwas Glück hat*) b. *mit viel Glück* c. *mit etwas mehr Zeit* d. *mit einiger Übung*
4. Partitive	belonging; part-of relation	a. *Ein Tisch mit drei Beinen.* b. *Ein Zimmer mit Frühstück.* c. *Eis mit Schlagsahne.*

Table 5.31: Heibig & Buscha's usages of *mit*

While the table above may be a good reference point for German language learners (the authors' intended audience), it is an incomplete picture of the range of usages of the preposition *mit*. This table covers only nine out of the twenty-five senses of *mit* captured in the data in this

dissertation. The usages covered in this table are compared to my frame analysis in table 5.32 below.

Heibig & Buscha	Frame in Current Study
1.1: Instrumental (by means of)	INSTRUMENT, MEANS
1.2.1 & 1.2.2: Accompanying circumstance; before substantives with obligatory or optional attribute	MANNER
1.2.3 Accompanying circumstance; before people and not-people (except for abstract nouns)	TOGETHERNESS, ACCESSORY
2. Temporal	CONCURRENCE
3. Conditional	CIRCUMSTANCE
4. Partitive	ATTRIBUTE, PARTITIVE

Table 5.32: Heibig & Buscha's usages of *mit* compared with the current study

The usages of *mit* found in this study which do not appear in Heibig and Buscha's work are the following 16 usages (listed alphabetically): AFFLICTION, AGENTIVE, AGREEMENT, AMALGAMATION, CAUSE, COLLABORATION, COMMUNICATION, CONNECTION, CONTAINMENT, DIRECTIONALITY, MATERIAL, OPPOSITION, POSSESSION, PROVISION, TEMPORAL_DIRECTIONALITY, and TOPIC. Some of the usages found in my study do occur with much less frequency than the ones covered by Heibig and Buscha, but some of them, such as CONTAINMENT, CAUSE, and COMMUNICATION_EXCHANGE do appear rather frequently in the NHG data and should be accounted for in a traditional grammar.

5.3.2 Duden's *Onlinewörterbuch*

The next work I wish to discuss is the Duden *Onlinewörterbuch* which is an online dictionary of the (New High) German language, comparable to the *Oxford English Dictionary*. This work lists eight distinct usages (12 if one counts the subsections) of prepositional *mit*, accompanied by examples. I have summarized the entry in table 5.33 below:

number	explanation	examples
1	a. expresses commonality, togetherness, collaboration with one or more while performing an activity	a. *Sie war mit uns in der Stadt.* b. *Willst du mit uns essen?*
	b. expresses reciprocity while performing an action	a. *sich mit jemandem streiten, austauschen, besprechen*

	c. expresses an active or passive participation in an activity or event	a. *Verkehrsunfälle mit Kindern (in die Kinder verwickelt sind)*
2	a. expresses belonging/affiliation	a. *eine Flasche mit Schraubverschluss* b. *ein Haus mit Garten* c. *Sprudel mit [Geschmack]* d. *Familien mit und ohne Kinder* e. *Herr Müller mit Frau*
	b. expresses inclusion	a. *der Preis beträgt 50 Euro mit Bedienung* b. *mit Pfand* c. *mit mir waren es acht Gäste* d. *die Jahrgänge bis und mit* (schweizerisch; *bis einschließlich*) *1940*
3	expresses that a container (of differing kinds) contains something	a. *ein Haus mit sieben Zimmern* b. *ein Glas mit Honig* c. *ein Sack mit Kartoffeln*
4	indicates the accompanying circumstances, the manner (or something similar) of an action	a. *Sie aßen mit Appetit.* b. *Das hat er mit Absicht getan.* c. *Sie lag mit Fieber im Bett.*
5	denotes the tool, means, or material with which something is done or which is used for something	a. *Sie machen Sex nur mit Kondom.* b. *mit dem Hammer, mit Kleister* c. *sich die Hände mit Seife waschen* d. *Sie kocht alles mit Butter. (verwendet für alles Butter zum Kochen)* e. *Er hat mit Devisen bezahlt.* f. *Sie ist mit der Bahn, mit dem Auto gefahren.*
6	a. establishes a certain general connection between verb and object	a. *Was ist los mit dir?* b. *Es geht langsam voran mit der Arbeit.* c. *Es geht bergauf mit ihm.* d. *Raus mit euch!*
	b. in connection to something, someone; considering (a matter); in slang, often part of a prepositional attribute	a. *sie mit ihren schwachen Nerven* b. *Der ist ja verrückt mit seinen vielen neuen Autos. (dass er sich dauernd neue Autos kauft)*
7	signifies a movement (or something similar) in the same direction	a. *mit der Strömung rudern* b. *Sie gehen mit der Zeit (passen sich der Zeitströmung, ihren Veränderungen an)*
8	signifies the concurrence of an event, happening (or something similar) with another	a. *mit [dem] (bei) Einbruch der Dunkelheit* b. *Mit 20 Jahren (im Alter von 20 Jahren) machte er sein Examen.*

		c. *Mit dem heutigen Tag ist die Frist abgelaufen.* d. *Sie starb mit 80 Jahren.*

Table 5.33: Duden *Onlinewörterbuch* entry for the preposition *mit*

This reference work covers sixteen of the twenty-five senses found in my data. Table 5.34 below shows the comparison between Duden's and my findings.

Duden	Frame in Current Study
1a: commonality, togetherness, collaboration	TOGETHERNESS, COLLABORATION
1b: reciprocity while performing an action	COLLABORATION, COMMUNICATION_EXCHANGE, OPPOSITION
1c: active or passive participation in an activity or event	CIRCUMSTANCE[106]
2a: belonging/affiliation	PARTITIVE
2b: inclusion	PARTITIVE
3: container contains something	CONTAINMENT
4: the accompanying circumstances, the manner…of an action	MANNER, CIRCUMSTANCE[107]
5: tool, means, or material with which something is done	INSTRUMENT, MATERIAL, MEANS
6a: general connection between verb and object	AGENTIVE, CIRCUMSTANCE[108]
6b: in connection to something, someone; considering (a matter); in slang, often part of a prepositional attribute	ATTRIBUTE
7: movement (or something similar) in the same direction	DIRECTIONALITY, TEMPORAL_DIRECTIONALITY
8: concurrence of an event, happening (or something similar) with another	CONCURRENCE

Table 5.34: Duden's usages of *mit* compared with the current study

[106] The correlation between Duden's 1c sense and the frame CIRCUMSTANCE depends on the example *Verkehrsunfälle mit Kindern*, not the description.
[107] The example *Sie lag mit Fieber im Bett* could be read as either CIRCUMSTANCE or CAUSE, though the description of Duden's sense 4 does not seem to include a causal reading.
[108] Only two examples of Duden's 6a appear in the data: *Wie steht es mit der Gegenliste* (NHG, categorized as CIRCUMSTANCE), and; *... dan es ward auß mit ihr* (ENHG, categorized as AGENTIVE).

As you can see from the table above, the authors of this work combine usages that I have split up, such as the three usages INSTRUMENT, MATERIAL, and MEANS and the two usages DIRECTIONALITY and TEMPORAL_DRIECTIONALITY. The authors have also split up usages which I have combined, such as (part of) their use numbers 2a and (the whole of) 2b, which I have combined into one frame, namely PARTITIVE.

Additionally, it seems as though the frame CIRCUMSTANCE proposed in this study fits at least partially into three of the usages outlined in Duden (1c, 4, and 6a).

The nine frames proposed in this study that are not represented in the Duden *Onlinewörterbuch* are: ACCESSORY, AFFLICTION, AGREEMENT, AMALGAMATION, CAUSE, CONNECTION, POSSESSION, PROVISION, and TOPIC, eight of which do not appear in Heibig and Buscha's work either (ACCESSORY being the exception).

5.3.3 *Lexikon deutscher Präpositionen* (Schröder 1990)

The most relevant and most thorough description of German prepositions comes from Jochen Schröder (1990) in the reference work titled *Lexikon deutscher Präpositionen*. The author states that his intentions of the work are to make more clear the usages of the NHG prepositions and to provide answers to questions about prepositional usage that traditional dictionaries and grammars do not. The work is intended for native speakers, German teachers, language learners, and linguists alike.

The lexicon is set up as follows. The German prepositions are listed in alphabetical order with corresponding case(s) listed. Then, each usage of the preposition is listed, first with a classification characteristic, for example, *Temporal*, *Modal*, or *Kausal*, along with a few brief observations about the usage, which may or may not include something about antonyms, frequency, and/or general observations. If the usage of the preposition with a specific classification characteristic includes multiple related usages, these are listed under subsections, again with a brief observational statement. Example sentences then follow. At the end of each individual usage is a shaded box that shows additional semantic characteristics, such as [+anim], meaning *animal* or [+poss] meaning *possession.*

Schröder uses ten different characteristic classifications to categorize the different usages of NHG *mit*, half of which are broken down even further by different semantic characteristics. I have constructed a table (table 5.30 below) to summarize the nine-page entry for *mit*. Because this entry is so lengthy, I have included the frames from this study that correspond to the usages Schröder outlines in the same table in the last column, headed “Frame”.

Classification	Observations	Examples	Semantic characteristics	Frame
1. Locative	direction of motion which matches a natural motion; antonym: *gegen*	a. *Mit dem Wind sollte sich ein Jäger nie an das Wild heranschleichen.* b. *Wenn Motorschiffe mit dem Strom schwimmen, brauchen sie kaum künstliche Energie.*	+loc +dir +konform dir (nat) +spezial	DIRECTIONALITY
2. Temporal	2.1 concurrency of adverbial events and sentential events	a. *Mit/bei Sonnenaufgang wanderten wir los.* b. *Mit dem Kriegsende begann für viele ein neues Leben*	+temp +simult +moment start/limit –term	CONCURRENCE
	2.2 age of a living being is the point in time of the beginning or end of a process	a. *Mit sechs Jahren kam er in die Schule.* b. *Mit 18 (Jahren) legte er das Abitur ab.*	none listed	CONCURRENCE
	2.3 in the sense of 'during the course of', often interpreted as conditionally	a. *Mit zunehmendem Alter muß die geistige Leistungsfähigkeit nicht absinken.* b. *Mit der Zeit (nach und nach) normalisierten sich die Beziehungen zwischen den beiden Staates.*	none listed	TEMPORAL_ DIRECTIONALITY
3. Instrumental	3.1 instrument has tool-like characteristic	a. *Er löste die Mutter mit einem Schraubschüssel, nachdem er sie mit dem Hammer gelockert hatte.* b. *Sie wäscht die Buntwäsche mit der/in der Waschmaschine.* c. *Zu Ehren des hohen Gastes schoß man mit/aus Kanonen Salut.*	+instr +instr 1	INSTRUMENT

Classification	Observations	Examples	Semantic characteristics	Frame
	3.2 instrument is a material	a. *Ältere Bürger füllen die Formulare oft mit Tinte aus.* b. *Die Arbeiter deckten das Dach mit Ziegeln.*	+instr +mat	MATERIAL
	3.3 instrument is a body part	a. *Er zog den Nagel mit den Fingern aus dem Holz.* b. *Der Spieler schob den Ball mit dem Fuß ins Tor.*	+instr +anthrop	INSTRUMENT
	3.4 instrument is a force of nature used by a person	a. *Heute werden Turbinen mit Wasser oder Dampf betrieben.* b. *Man hat die ersten Versuche zur Bewässerung mit künstlichem Regen gemacht.*	+instr +nat	MATERIAL
	3.5 institution or person as instrument or facilitator	a. *Die Nachtricht kam mit Kurier/durch Kurier.* b. *Er erhielt das Paket mit der Bahn/durch die Bahn.*	+instr +instit/hum	MEANS
	3.6 transportation	a. *Er fährt mit seinem Auto nach Berlin.* b. *Er fährt mit dem Zug nach Berlin.*	+instr +traf	MEANS
4. Medial	adverbial event characterized as causal or intentional means	a. *Mit einer/durch eine Kopfbewegung machte er ihn auf sie aufmerksam.* b. *Mit Beharrlichkeit/Ausdauer und viel Fleiß erreichte die Sportlerin ihre Weltgeltung.*	+medial +intentional (+caus) (+instr) (+deverbativ/deadj)	MEANS, CAUSE
5. Modal	5.1 modal adverbial in which the noun is only a complement of the	a. *Der Schiedsrichter leitete das Spiel mit lockerer Hand.* b. *Der Baß sang mit lauter/schöner Stimme*.	+mod +adjekitv +komplement	MANNER

Classification	Observations	Examples	Semantic characteristics	Frame
	adjective attribute that modifies the manner of the action			
	5.2 deadjectival nouns which correspond to adjectival adverbs that express a second predication; antonym: *ohne*	a. *Mit sehr großem Argwohn betrachtet er den tropfenden Wasserhahn.* b. *Sie verließ mit hoch erhobenem Kopf das Zimmer.*	+mod +deadj (adjadv = nebenprädikat) (+grad)	MANNER
6. Sentence Adverbial	no explanation[109]	a. *Mit Sicherheit ist er im Betrieb aufgehalten worden.* b. *Mit größter Wahrscheinlichkeit wird er die Prüfung bestehen.*	none listed	N/A: did not show up in data
7. Comitative	7.1 the companion has the same salient characteristics but can be subject to a different gradation; antonym: *ohne*	a. *Inge ging (zusammen) mit ihrem Mann ins Konzert*. b. *Sie schickte den Brief (gleichzeitig/zusammen) mit dem Paket ab.*	+komitative +sem konform (+koordination)	TOGETHERNESS
	7.2 something belongs to someone, but is not a part of them; antonym: *ohne*	a. *Inge stand mit dem Stadtplan auf dem Markt und suchte den Weg.* b. *Bernd schwamm immer mit Badekappe.*	+komitativ +akzessor	ACCESSORY
	7.3 something belongs to a person and is	a. *Der Schüler saß mit hochrotem Kopf über seine Arbeit.*	+komitativ +pertinenz +nebenprädikat	ATTRIBUTE

[109] While Schröder does not include a prose explanation, he does include paraphrases of the two examples listed. The paraphrases show the *mit*-phrase restated both as an adverb (*sicherlich*, as the paraphrase for *mit Sicherheit* from example (a) and a full clause (*Es ist mit Sicherheit so…*). These paraphrases indicate that the *mit*-phrase applies to the rest of the utterance, thus showing it to be a sentence adverbial.

Classification	Observations	Examples	Semantic characteristics	Frame
	not able to be separated from that person			
	7.4 a part of a whole (that can also be the whole)	a. *Mit zehn Spieler (von einer elfköpfigen Mannschaft) gewann der Trainer das Fußballspiel.* b. *Mit 61 (von 120 möglichen) Punkten gewinnt man ein Skatspiel.*	+komitativ +pertinenz kollektiv +pars (+toto)	MEANS[110]
8. Conditional	conditional adverbial caused by a very general relationship between the antecedent and the adverbial substantive, which is attributable to a possessive relationship	a. *(Nur) mit einigem Geschick lernt man die Knüpftechnik schnell*. b. *Mit einer Blinddarmentzündung wird man ins Krankenhaus eingeliefert.*	+caus 1 +kond +poss	CIRCUMSTANCE
9. Causal	cause of a state or condition with an underlying possessive relation	a. *Er lag mit einer Blindarmentzündung im Bett.* b. *Sie lag mit hohem Fieber im Krankenhaus*.	+caus 1 +caus 2 +perinenz/possessiv	CAUSE
10. Special Forms	10.1 Modal (no explanation)[111]	a. *Sie haben alles mit Stumpf und Stiel (vollständig/restlos) aufgegessen.* b. *Mit Mann und Roß und Wagen hat sie der Herr geschlagen. (vollständig/restlos).*	none listed	TOGETHERNESS

[110] The MEANS reading is based on the example sentences, not on the observations. According to the observational comments, I would categorize this as PARTITIVE.

[111] Schröder does not include a prose explanation here, but again relies on paraphrases of given examples. In this case, he gives his paraphrases for *mit Stumpf und Stiel* and *mit Mann und Roß und Wagen* within the example as *vollständig/restlos*.

Classification	Observations	Examples	Semantic characteristics	Frame
	10.2 (no title or explanation)[112]	a. *Mit ihr/um sie steht es schlecht.* b. *Wie geht es mit deiner Arbeit?* c. *Was ist mit dir?*	none listed	CIRCUMSTANCE
	10.3 *mit Hilfe von* used as a preposition, especially when a person is conveyed as quasi-instrument	a. *Nur mit Hilfe von eines Spezialisten konnte der Kranke gerettet werden.* b. *Mit Hilfe von anderen Kraftfahrern konnte der Schaden an meinem Wagen behoben werden.*	none listed	MEANS

Table 5.30: Schröder's usages of *mit* with comparison to the current study

Here it is important to note that one of Schröder's usages, namely usage 6, the sentence adverbial, did not appear in my data. Despite its absence from my data, it should be acknowledged that this usages is alive and well in NHG. This shows that though this is a rigorous lexical examination of *mit*, it is not exhaustive. More data should be analyzed in order to confirm the findings outlined in this chapter.

While Schröder's analysis seems at first glance to be more detailed than the two works discussed above, it is actually the case that he only includes twelve of the twenty-five usages outlined by the frames in this study–this is four less than Duden's *Onlinewörterbuch*. The usages which seem to be omitted in Schröder's work are as follows: AFFLICTION, AGENTIVE, AGREEMENT, AMALGAMATION, COLLABORATION, COMMUNICATION_EXCHANGE, CONNECTION, CONTAINMENT, OPPOSITION, PARTITIVE, POSSESSION, PROVISION, and TOPIC.

Seven of the frames which do not appear in Schröder's work, namely AFFLICTION, AGREEMENT, AMALGAMATION, CONNECTION, POSSESSION, PROVISION, and TOPIC, do not occur in any of the literature discussed in this chapter. This is most likely due to the fact that they are some of the more specific usages, i.e. they appear lower down in the polysemy network. Additionally, and more importantly, none of the authoritative sources discussed above used corpus data to arrive at their analyses.

[112] Again, Schröder relies on paraphrases here to exemplify the meaning of the *mit*-phrase. The paraphrases listed for examples (a), (b), and (c) are as follows: (a) *Ihr geht es nicht gut*, (b) *Wie steht es um deine Arbeit?,* (c) *Was hast du? Fühlst du nicht wohl?*

5.4 Conclusion

In the first section of this chapter I have presented a frame semantic analysis of the data collected for this study, which includes 1200 examples of the preposition *mit*.[113] I have discussed the frame-to-frame relations and shown examples from each time period (where applicable) in the examination of each of the twenty-five frames. In the second section, I have provided visual representations of both the synchronic and diachronic polysemy networks of *mit* and discussed any interesting observations which emerged. In the third section of this chapter, I have briefly discussed the treatment of *mit* in three authoritative works and compared them to my findings.

The next chapter includes a brief summary of the topics examined in each of the preceding chapters, concluding remarks, and commentary about further investigations.

[113] Though I have only selected up to five examples of each usage from each time period, I have included all examples in Appendix A for reference.

CHAPTER 6: CONCLUSION

6.1 Summary

In this dissertation I have offered a new framework in which to analyze the polysemy networks of a non-spatial preposition both synchronically and diachronically. I have done this by closely examining the German preposition *mit* and showing the meaning changes it has undergone throughout the documented history of the language. Additionally, I have shown the motivation for these particular changes by using a frame semantic approach in which I have analyzed 1200 instances of *mit* from Old High German to New High German and drawn up polysemy networks of this preposition in each of the time periods examined. I then compared each of these networks diachronically to determine the meaning changes or shifts which *mit* has undergone.

As far as I am aware, there are no established frameworks designed to undertake the task of demonstrating the full range of polysemy of a non-spatial preposition diachronically, though, again, there have been studies that describe this range of polysemy (see Brenda 2014, Brugman 1981, Dekeyser 1990, Meex 2001, de Mulder & Vanderheyden 2013, among others). These works are indeed significant, as they are some of the first studies to show the full range of polysemy of one or more prepositions; however, there is no framework behind the studies which would provide us with a systematic way in which to go about this research. It is my hope that with the research presented here, I have offered a method that fills this gap in historical lexical semantics.

In addition to the accomplishments above, in the early chapters I have provided the reader with background knowledge in the area of lexical semantics. Specifically, in chapter 2, I presented and discussed many prominent theories and approaches to lexical analysis from the pre-cognitive perspective, including lexicography (Grimm & Grimm), lexical field theory (Trier 1931, Lehrer 1985, Rice 1993), componential analysis (Leech 1969, Philipp 1998), generative semantics (Katz & Fodor 1963, Bierwisch 1988), the natural semantic metalanguage (Wierzbicka 1972 and 1995, Goddard 2011 and 2013) and conceptual semantics (Jackendoff 1991). In chapter 3, I introduced three prominent cognitive theories and approaches to lexical analysis, including semantic categorization and prototype theory (Rosch 1973 and 1975, Labov 1973), conceptual metaphor and metonymy (Lakoff & Johnson 1980), and frame semantics and FrameNet (Fillmore 1968, Ruppenhofer et al. 2016). To supplement discussion of these approaches, I discussed their application to prepositional analysis (Brenda 2014 on English *over*, Meex 2001 on German *über*, and Petruck & Ellsworth 2018 on representing spatial relations in FrameNet). I also provided the reader with an overview of the evolution of frame semantics (Fillmore 1968, 1970, 1975, 1976, 1977,1982, Fillmore & Atkins 1992, Fillmore & Baker 2009). Finally, I examined cognitive semantics as applied to meaning change, with emphasis on the invited inferencing theory of semantic change (Traugott & Dasher 2004) and a discussion of a study on meaning change in Old and Middle English prepositions (Dekeyser 1990).

6.2 Findings

The research in this study has shown that there currently exist (at least) twenty-five distinct usages of NHG *mit*, many of which are not listed in some of the leading authoritative works, such as *Duden*. This is most likely due to the fact that these works did not use corpora in order to compose lexical entries for the words contained in them. By employing a corpus-based approach, we can see that many of the less frequent (or perhaps newer) meanings of *mit* have been overlooked by these works and can argue that, in order to really see the full range of polysemy of a word, one must analyze the language in use.

This study also found that three usages of *mit* may have developed and become more frequent since the Old High German time period. These usages are: TEMPORAL_DIRECTIONALITY, which does not appear in the corpus until the New High period; PARTITIVE which appears first only once in Middle High German, twice in Early New High and four times in New High German; and CONNECTION which appears first only once in Middle High and once in Early New High, but twenty-nine times in New High German. In order to confirm these findings, it would be best to analyze a larger amount of data; however, the data here is a solid indication of the range of polysemy of German *mit* throughout the documented history of the language.

6.3 Further research

This research could be expanded in a plethora of ways. First and foremost would be to apply this framework to other (spatial or non-spatial) prepositions (or any other syntactic category really!). Applying this framework to etymologically related lexical items such as English *mid-*, Dutch *met*, Afrikaans *met*, among others would give us a more complete picture of the evolution of the word in different branches of Germanic. The Modern English counterpart *mid* survives in very few lexical items, such as the noun *midwife*, so it would be especially interesting to see the evolution in this branch.

Furthermore, if this framework is applied to other non-spatial prepositions, there is a chance that predictable patterns of use may emerge. We could answer, for example, questions like *Is it always the case that the majority of usages of non-spatial prepositions descend from a locative usage?* or *Are there cases in which there is no clear relation of one usage of a non-spatial preposition to the rest of the polysemy network?*

It would also be interesting to research which other words evoke the frames outlined in this dissertation in order to get a more complete picture of the frames themselves.

Furthermore, as stated throughout this work, it would be advantageous to examine a larger amount of data in order to confirm the findings indicated by this research.

6.4 Conclusion

It is my goal that in presenting the research in this dissertation, I have both shown the reader the range of polysemy of German *mit* (both diachronically and synchronically) and offered historical semanticists a new method to employ in examining the polysemy networks of non-spatial prepositions.

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APPENDIX A: DATA

The following list includes all 1200 examples of *mit* analyzed in this study. The data as listed below appears in the original form in which it was extracted from the corpus. I have organized the data alphabetically by frame name. Under each frame heading, the examples are sorted by language period from oldest to newest (OHG, MHG, ENHG, NHG). In many examples, in the far right column under the heading "Frame 2", a second frame name appears. This indicates that the example is ambiguous and evokes both of the frames listed. These examples will appear twice in the list below, that is, once under each frame evoked.

Some of the examples sentences or sentence fragments include more than one instance of *mit.* It is sometimes the case that each instance evokes a different frame, i.e. each instance is a different usage of the word. In these examples, the instance of *mit* which is analyzed appears in bold text.

	ACCESSORY **Example**	**language**	**frame 1**	**frame 2**
1	daz unser herro Ihesus Christus zuo den heiligen bóton imo iruueliti sibinzic unta ziuueni iungerun , der er îe ziuueni unte ziuueni fure sante mit sinera predige in îegiliche burch unte stat , dare er	OHG	accessory	
2	mit managemo megine inti mihilnesse . Thanne sentit sine engila **mit** trumbun mit mihileru stemmu , inti gisamanont sine gicoranon fon	OHG	accessory	
3	uuiso . Oh fimf dumbo intfanganen liohtfazzon ni namun oli mit in , thio uuisun uuarlihho intfiengun oli in iro faz	OHG	accessory	
4	megine inti mihilnesse . Thanne sentit sine engila mit trumbun **mit** mihileru stemmu , inti gisamanont sine gicoranon fon fior uuinton	OHG	accessory	attribute
5	Daz dier bizeihchenet den mán , der dir giuuárnôt ist **mit** allên dûgeden , mit mínne , mit driuûon , mit	OHG	accessory	
6	mán , der dir giuuárnôt ist mit allên dûgeden , **mit** mínne , mit driuûon , mit allero reinnussedo , den	OHG	accessory	attribute
7	Ir sizzet in thera burgi , unz ir sit giuuatite mit megine fon hóhi . Tho leita hér sie úz in	OHG	provision	accessory
8	der geuangin was . unde in mit stride irloiste . uan der ge=uanchnisse . An der widiruerte begeginde ime melchisedech **mit** sime prisante un do offente der heilige geiste . dat der . der die hohesten stat hat in der ecclesien	MHG	accessory	

	ACCESSORY	Example	language	frame 1	frame 2
9	suln verkaufen dane si en haben ain banc auf dem schuohause ie der man Ven sol auch ie der man **mit** seinen schuohen vnd mit seinen leder sten an dem freitage vnd an dem samstage auf seiner penke . vnd sol		MHG	accessory	
10	en haben ain banc auf dem schuohause ie der man Ven sol auch ie der man mit seinen schuohen vnd **mit** seinen leder sten an dem freitage vnd an dem samstage auf seiner penke . vnd sol ez da verkaufen vnd		MHG	accessory	
11	setzet oder verkaufet anderswa der gibt ze buoze ie von den stuecke sehtzig haller Ez sol auch . nieman sten **mit** grawen noch mit leinen tuoch ze marckt . er en habe denne ain panc in . dem wathause . da		MHG	accessory	
12	anderswa der gibt ze buoze ie von den stuecke sehtzig haller Ez sol auch . nieman sten mit grawen noch **mit** leinen tuoch ze marckt . er en habe denne ain panc in . dem wathause . da er vffe ste		MHG	accessory	
13	aber schuldig zwaier pfvnde . vnd swer dez geltes niht hat man schleht im abe die hant Swer auch lavffet mit verpotte=ner wer verliche zvo ainem criege . der gibt auch zwai / pfunt Man sol auch nieman der verbotten wer		MHG	accessory	
14	Sis du die werilt ane na diner genuogeden ove einich dinc die in der werilde sint zuohantz steis du mit eime unkuizheme herzin vuor Gode nochdandat du nie me unkuiz in wurdes an me live nochdan heizes du		MHG	accessory	attribute
15	gab in da bi bilde . daz wir alle er=sten suln an me iungistin tage **mit** deme selben libe vnd mt der selben sele als wir nv schinen . Daz er ersten solde von me tode . vnd vns alle mit		MHG	accessory	attribute
16	anderswa der gibt ze buoze ie von den stuecke sehtzig haller Ez sol auch . nieman sten **mit** grawen noch mit leinen tuoch ze marckt . er en habe denne ain panc in . dem wathause . da er vffe ste		MHG	accessory	
17	. daz iz keine frucht brachte . abir daz in dy gute erde vil . daz synt dy . dy mit eyme guten herczen . vnde myt eym allirbesten herczen gotes wort horen . vnde behalden vnde vort brengen in dy		MHG	accessory	attribute

	ACCESSORY	Example	language	frame 1	frame 2
18	. abir daz in dy gute erde vil . daz synt dy . dy mit eyme guten herczen . vnde myt eym allirbesten herczen gotes wort horen . vnde behalden vnde vort brengen in dy gedult an dem vritage dor noch		MHG	accessory	attribute
19	in sine menscheit . vnd gab in da bi bilde . daz wir alle er=sten suln an me iungistin tage mit deme selben libe vnd mt der selben sele als wir nv schinen . Daz er ersten solde von me tode		MHG	accessory	attribute
20	gebaere ein chint . daz solt ih-c geheizzen werden iz scholt hail un gnade ze siner chumfte aller dirre werlte mit im bringen . Wie daz chome des begunde si ze uragenne . niht daz si got sines gewaltes missetruwet .		MHG	accessory	
21	heilige geist kuomen an der morgenstunde dat wir quemen zuo siner scholen Dit wort sprach bischof Albret wir suolen kuomen **mit** gesamindin sinnen inde mit offenen oren inde mit hangindin herzen mit urlove gesprochen also virleckert dat wir ingeiner ander		MHG	accessory	manner
22	ich din gast Zv eren den beschriben Die da mit strit vertriben Haben . vz pruzen lande Abgote mancher hande **Mit** ritterlichem swerte So lange ez do werte Daz der geloube bluet In deme lande gluet Ouch gotliche caritas Die		MHG	accessory	instrument
23	burger dem Rihter niht antwrten sol vmb keyner ley getat der man im schulde gibt . diweil der clager **mit** dem rehten niht clagt . vnd wenne auch der clager mit dem rehten clagt . vnd daz iener mit dem		MHG	attribute	accessory
24	man im schulde gibt . diweil der clager mit dem rehten niht clagt . vnd wenne auch der clager **mit** dem rehten clagt . vnd daz iener mit dem rehten vellig wirt der da beclagt wirt . so sol der		MHG	attribute	accessory
25	clager mit dem rehten niht clagt . vnd wenne auch der clager mit dem rehten clagt . vnd daz iener **mit** dem rehten vellig wirt der da beclagt wirt . so sol der rihter fragen di scheppfen waz seins rehten dar		MHG	attribute	accessory
26	vnde al der xp̄n=heit zv troste vnd zv genaden . wa=ne als huote wolde er ersten von me to=de . mt deme selben libe den er duorch vns zv der marter gab . er zvbrach die helle vnd bant den		MHG	attribute	accessory

	ACCESSORY	Example	language	frame 1	frame 2
27		noch schribit . sente matheus In der czit . sprach ihesus czu synen iungeren . alse des menschen sun ku=myt myt syner macht . vnde alle syne engele myt ym . so syczit her uf den stul syner gewalt . So	MHG	attribute	accessory
28		521. der gotlychen lyeb , dye der heyllig geist selbst wossenlych ist , lief auf speren mit dem sper , das das aus dysem kamyn vnd inhyczigen aytofen heraus schlyegen die feureteten	ENHG	accessory	
29		1129. erstochend etliche , als wart Rinfelden mortlichen , boßlichen gewunnen , luffend in die stat mit verhencten messeren , besunder für Rat , fiengend die obersten in turnne (.) ein teil	ENHG	accessory	
30		1176. woltend die von Rinfelden win und anders gereichet han zuo Herten , des zugend die von basel usß mit der baner , jochtend su biß gon Rinfelden ze m grendel in , su spienend	ENHG	accessory	
31		1177. basel usß , zuo fuosse , zuo Rosse , gegen tage uff die zwey , mit vil karren , wegen , zugend gon herten , nomend vil wins , korn vnd	ENHG	accessory	
32		1229. funden , was die oberlender ersluogen mit hallebarte zuo grunde (.) die von basel zugend **mit** der baner zem keppelen zuo eschmertor (.) werend su furcher gezogen , werde die stat	ENHG	accessory	
33		1231. sinen suochte , dz beschach , komend ij herolt dar (:) getoerste niemand kein messer mit jmme dar tragen , do worend brediger , augustiner , barfuossen vnd sust lutt ,	ENHG	accessory	
34		1232. jmme dar tragen , do worend brediger , augustiner , barfuossen vnd sust lutt , mit stoßkarren vnd sust karren , die dz volck zamnen fuorttend , samstag , sunnentag (.)	ENHG	accessory	
35		1238. wegen (.) Jten eta p{5} asunptonis marie xlv zugend die von basel mit macht , **mit** cc wegen , karre{6} , mit grossem gezuge gon Rinfelden (.) der zug werte von	ENHG	accessory	
36		1248. Jten des wurdent die von basel zuo Rinfelden in herr gewar vnd santte{6} meister iohan mit hagel vnd tarras buchses zuo nacht gegen sime herr vnd schussend trefflich vber Rin in	ENHG	accessory	
37		1265. nat{3} marie komend die von obren sibental , von sanen , arburg , frutingen , **mit**	ENHG	accessory	

	ACCESSORY	Example	language	frame 1	frame 2
		der hoebtbaner vnd sust v baner , wol mit ijm , ijc pherd , vil			
38		1266. sanen , arburg , frutingen , **mit** der hoebtbaner vnd sust v baner , wol mit ijm , ijc pherd , vil soemer mit vil kost , was den wart ,	ENHG	accessory	
39		1267. hoebtbaner vnd sust v baner , wol mit ijm , ijc pherd , vil soemer **mit** vil kost , was den wart , stulet z als (.) wo su priestergarten ,	ENHG	accessory	
40		1270. hattend , zugend die von basel mit eime starcken zuge , Reisig , fuoßgenger , **mit** buchsen , nach mitternacht uff iij vber Rin usß gon Rinfelden , domit zuo behuotten	ENHG	accessory	
41		1272. hoebtbaner vnd ein bloß swert vnd uff turmtend vnd am andre{6} sitten zem sturm Rustend mit leittren , katzen , bruggen vnd alle buchsen geladen worend , ein teil usß gelon	ENHG	accessory	
42		1983. weit . Deßhalben die leüt , so da gehn wasser zu schoepffen / , sich **mit** stricken vnnd lederin Aymern / oben mit rayflein ein gefangen / , wie die in	ENHG	accessory	
43		1985. wie die in disen Landen gebreüchig / , versehen / , derogleichen auch die Kauffleüt **mit** sich auff den weg nemmen / , so da willens mit Carouanen [COMMA] durch grosse	ENHG	accessory	
44		2255. sich dem Gott Appollo beuolhen het / , nam er zuo jm seinen spieß / mit eynem starcken viereckeken eisen versehen / , saß vff sein pferd / , das geheyssen	ENHG	accessory	
45		2305. wolt / , sunder es mit rechtem streit gewinen . (.) Es kam der Heyd **mit** seinem schwerd Plorantz zuo Oliuiern / (.) vnd da er jn komen sahe / ,	ENHG	accessory	
46		2307. hieß Batime / , das het eyn breyte vnd lichte schneid / (.) darmit vnnd mit dem wenigen theyl schilts / , das er noch het / , begegnet er dem	ENHG	accessory	
47		2308. von Allexandrien / , ietzund ist es zeit zu retten / , dan ich bin mit ewerem eygen schwerdt versehen / , darmit ich euch noch vnmuettig machen wil / (.)	ENHG	accessory	
48		2330. die Heyden inn eynem grund / (.) Ruland was der erst / , der sie mit duerandal , seinem geraufften schwerdt , an rant / der meinung vnnd fuersatz , an	ENHG	accessory	

	ACCESSORY Example	language	frame 1	frame 2
49	1264. sibental nidren , mit der hoebtbaner , zwen wisß turnne , **mit** c Rossen geladen mit spis , nat{3} marie xlv (.) Jten sexa p{5} nat{3} marie komend die von obren	ENHG	accessory	togetherness
50	1241. leger uff geslagen gegen Rinfelden , mit eime grosß{1}et , reisigen gezuge vnd fuoßfolck , **mit** vil wegene{6} , sluog do sin feld mit vil gezelten uff gegen den von basel	ENHG	accessory	
51	1266. sanen , arburg , frutingen , mit der hoebtbaner vnd sust v baner , wol **mit** ijm , ijc pherd , vil soemer mit vil kost , was den wart ,	ENHG	accessory	
52	1175. uff [COMMA] liesß die drige in , bslussend grendeltor , machtend sich uff den turn mit geschutz (.) begert der Hoebtman sin vingend , men wolt es nit tuon (.) er	ENHG	attribute	accessory
53	808. c (.) so ist niemand verwehrt / , ledig zu bleiben / , wer es mit gutem Gewissen vnd ohn aergernuß thun kan / , wie es dann ein jeglicher vor	ENHG	manner	accessory
54	3797. dye warheyt , So hoere , was dyr der Apostolus Paulus saget (.) Volg oehm mit rechter andacht , Schmecke nuechtern und messig die schrifft (.) Anderst nympst du vor honig	ENHG	manner	accessory
55	660. / (.) welche aber zu zwoelff gulden bestimbte besoldung haben / , mueessen alle zeit mit jren pferdtn auf Jegclichs gepot gerecht sein / , auf jren aignen Chosten / (.)	ENHG	togetherness	accessory
56	Zugleich trugen sie ein Ratsschreiben an den Doktor Theophrastus von Hohenheim mit sich.	NHG	accessory	
57	Wissen Sie, daß Leporis uns alle da oben im Schloß immer etwas verängstigt hat, er geht zu seinen Patienten mit schwarzen Handschuhen.	NHG	accessory	
58	Vom 1. Juli an wurden überall Sturmstellungen angelegt, schmale Gräben, 100 Meter vom Feinde ab, in denen wir uns mit Leitern und Handgranaten bereitstellten.	NHG	accessory	means
59	Der mit der Teetasse ergriff das Wort.	NHG	accessory	possesion
60	Über die Zeit kommen mit Arbeit oder Wursteln, aber nicht denken!	NHG	accessory	
61	In Wirklichkeit landen wir heute **mit** der gleichen Sicherheit, mit der wir starten und fliegen."	NHG	manner	accessory

AFFLICTION	Example	Language	Frame 1	Frame 2
1	, die luginare , die diûbe , die sint piheftit mit des tiufalis uuerhi : uone danne ni uuerdunt si nieth	OHG	affliction	
2	euua gilerten ist ouh uúæ , bithiu ir ladet man **mit** lesti thia sie fortragan ni mugun , inti ir mit	OHG	affliction	containment
3	Her thô antlingenti quad : ni uuili . After thiu mit riuuu giruorit fuor thara . Gieng her thô zi themo	OHG	affliction	
4	Inti árgieng sín liumunt in alla Syria , inti bráhtun imo alle ubil habante inti mít messalihhen suhtin inti mit uuizziu bifangane , inti thie thár habetun diuual , inti	OHG	possession	affliction
5	Der minnor saltr ist den gemachet . di in uertn sint . oder in den scefen . oder beuangen sint **mit** sichtuome . oder mit ummuoze . daz sie den merorn niht gesprechen megen . Den ordinot . sant Volrich	MHG	affliction	
6	den gemachet . di in uertn sint . oder in den scefen . oder beuangen sint mit sichtuome . oder **mit** ummuoze . daz sie den merorn niht gesprechen megen . Den ordinot . sant Volrich . DOMen . an	MHG	affliction	
7	huisvrouwe vir Lie die was suirougich inde hadde viele vruothe vir Razel hadde clare ougen inde sach cleirlichen want si mit niethe bekumbert in was Dar umbe is it dat vriedelichste want dan is man gesezzen zuo den vuozen alse Marie	MHG	affliction	
8	gynk in allem syria vnde brachten ym alle dy vor . dy suche hatten von manchir hande suche . vnde myt pynen begriffen . vnde dy . dy do bose geiste hatten . vnde dy uzseczegen machte her gesunt . vnde	MHG	affliction	
9	. da mide hei die bedruofden undersezzen sal . unde gester=ken . die da crankes muodes sint . unde mit truorecheite zerbrochen . dat sie . uer=zwiuelunge . ungetroestet ith uerderue . wie sie einandere sulen ruegen . Ist dat	MHG	affliction	agentive
10	. duorch daz so qam ein vreislich vrteil ober daz volk . daz was der gahe tot . der qam mt einer suo=the . die bestunt die lute vme die hegedruose . wen sie bestuont der muoste zvhant sterben .	MHG	affliction	
11	2278. darauß erschinen / , dan jre streych gaben lauten schall . (.) Keyser Carle was mit hefftigen gedaencken beladen / vnd erwag , das Oliuier eyn gerechte forderung hette / ,	ENHG	affliction	

AFFLICTION	Example	Language	Frame 1	Frame 2
12	Auch deshalb kritisiert Eberhard Diepgen das Holocaust-Denkmal; es belastet seine heile Welt mit negativer Erinnerung und trübt den quellreinen Unterstrom einer restaurierten deutschen Leitkultur.	NHG	affliction	

AGENTIVE	Example	Language	Frame 1	Frame 2
1	in themo seuue , só thaz thaz skef uuard bithekit mit then undon . Her thó uuas in themo skefe ubar	OHG	agentive	
2	bielde miner selen da ane liet du hoiste selicheit da mit siner genaden wider gemachit werde dat naturliche bielde dat **mit** der sunden virdilijt is noch lengede des guoden levenis noch gebeth noch manichveldicheit der werke vireinichit dich zuo Gode mer	MHG	means	agentive
3	. da mide hei die bedruofden undersezzen sal . unde gester=ken . die da crankes muodes sint . unde mit truorecheite zerbrochen . dat sie . uer=zwiuelunge . ungetroestet ith uerderue . wie sie einandere sulen ruegen . Ist dat	MHG	affliction	agentive
4	484. sein mynigklychs angesicht erplaycht vnd aller sein heylliger , junckfreulycher fronleyb ergylbt vnd erplabt ist mit todes farb , alls er sych czw der plue dis sybenten wort geschyckt hat (.)	ENHG	agentive	
5	2001. Rachel bewai= net jre Kinder/ vn̄ wolte ſich nit tr̊oſten laſſeu / , dan es ward auß mit jhr . (.) () Jn disem Kloster / , weil es zuo oberst an der	ENHG	agentive	
6	832. zwang / , kein verdienstlich Werck drauß gemacht / vnd daß das Christliche Volck nicht mit vilen Ceremonien vber haufft oder beschwaert / vnnd darbey das nothwendige vnderlassen werde: dann vil	ENHG	cause	agentive
7	574. erhyczigt vnd erwermt werdest von dyssem edlen rosmarinwein , das dein hercz gancz verwunt werd mit der lyeb der verwunten herczen deines allerlyebsten lyebhabers (.)	ENHG	instrument	agentive
8	848. weg zu . (.) Jst dann jhr Glauben new / , so muß er entweder mit Himmlischen Zeichen bewiesen werden: oder auff daß wenigst / , daß der jhn hat gepredigt	ENHG	means	agentive
9	1202. die ternitat{3} ano . xlviiijc . kam hertzog albrecht in geritten gon Rinfelden , wart mit dem heltuom erlichen enpfange{6} , es was aber nutz in der stat , muost Ritten	ENHG	means	agentive
10	Und ich werde mich dann natürlich nicht mit einer Ohrfeige begnügen, sondern rechts und links schlagen, bis dir die Backen anschwellen.	NHG	means	agentive
11	Es wurde ziemlich finster, wir hatten keinen Mond und mußten uns mit dem Sternenlicht begnügen.	NHG	means	agentive

AGREEMENT	Example	Language	Frame 1	Frame 2
1	in morgan gileitan uurhton in sinan uuingart . Gizunfti gitanera mit then uurhton fon tagelone santa sie in sinan uuingart .	OHG	agreement	
2	strengon , inti thanne sín hús imo binimit ? Thie mit mir n ist , ther ist uuidar mír , inti	OHG	agreement	
3	friunt , ni tuon ih thír hárm : eno ni gizunftigotas tu thíh mit mir fon themo phennige ? Nim thaz dar thin ist	OHG	agreement	
4	gedult an dem vritage dor noch schribit . s . iohannes In der czit saite ihesus synen iungeren . der **myt** myr nicht ist . der ist wedir mich . vnde der myt mir nicht sament der czustrouwet . dar	MHG	togetherness	agreement
5	der czit saite ihesus synen iungeren . der myt myr nicht ist . der ist wedir mich . vnde der **myt** mir nicht sament der czustrouwet . dar vmme sage ich uch . alle sunde . vnde alle honsame schymphe	MHG	togetherness	agreement
6	575. Sambt des Moſcouiter / vnd seiner anrainer beschreibung vnd anzaigung / , in wen sy glaubens halb / mit vns nit gleichhellig . (.) Wie die Potschafften oder Gesanten durch sy emphangen vnd gehalten	ENHG	agreement	
7	751. siben Concilien alle Baepst sein wirdig geacht worden Sanct Peters stuels / , dann sy mit vns ainhellig gewest sein / (.) Jn dem ersten Concilio was Siluester der Bapst /	ENHG	agreement	
8	1233. herren zem tantz in die herberg zem jmbes (.) Jten der telffin mach einen friden mit der stat basel (.) Reit ij cardinel min her von basel zem telfin gon altkilch	ENHG	agreement	
9	Die Verhandlungen über einen Handelsvertrag mit Frankreich werden abermals vertagt.	NHG	agreement	
10	Der Streik richtete sich ursprünglich gegen die New York Times, die Daily News, das Journal-American und die World Telegram and Sun; jedoch stellten die Verleger des Mirror, der New York Herald Tribune, des Long Island Star Journal, der Post und der Long Island Press aus Solidarität mit den bestreikten Zeitungen ebenfalls ihr Erscheinen ein.	NHG	agreement	
11	Die Verwaltung wird von Italien auf Grund eines mit der UNO abgeschlossenen Abkommens (Wortlaut: 2221 D) besorgt, seit Großbritannien ihm am 1. April 1950 die Verwaltung übergab (siehe 2316 D).	NHG	agreement	

AGREEMENT	Example	Language	Frame 1	Frame 2
12	Man habe sich lange gefragt, wie er dieses Versprechen verwirklichen wolle, ohne die von der früheren Regierung eingegangenen Verträge mit den USA ausdrücklich zu kündigen.	NHG	agreement	
13	Ohne den Prinzipien des Schutzzolles selbst etwas vergeben zu wollen, denkt der Präsident, über die Reziprozität mit Kanada hinaus, ernstlich an eine Herabsetzung der Zölle jener Tarifgruppen, die Lebensbedürfnisse umfassen.	NHG	agreement	
14	Der Delegierte Polens, Katz-Suchy, kam sodann auf die Bezugnahme auf die Friedensverträge mit Ungarn und Bulgarien in dem australisch-bolivianischen Antrag zu sprechen und stellte es in Frage, ob die Vereinten Nationen das Recht einer Kontrolle der Durchführung dieser Friedensverträge haben.	NHG	agreement	
15	Aber wie mochte sie das wohl mit dem Gebote der Wahrhaftigkeit vereinen, das die Fremden den Chinesen gegenüber doch so oft betonten?	NHG	agreement	
16	Opus 1., indem er für einen besonderen Namen, über den er noch nicht mit sich einig war, oben Platz ließ.	NHG	agreement	
17	UN-Generalsekretär PEREZ de CUELLAR nannte diesen Beschluß unvereinbar mit den Verpflichtungen der USA aus dem Gastlandabkommen von 1947.	NHG	agreement	
18	Daß keiner der Mediencodes Kongruenz mit dem Moralcode erreichen kann, daß Eigentümer nicht mehr Achtung verdienen als Nichteigentümer (schon weil jedermann Nichteigentümer fast aller Güter ist, wie reich immer er sein mag), hatten wir schon mehrfach betont.	NHG	agreement	
19	Lächerlich ist der sich mit der gesellschaftlichen Harmonievorstellung innerlich und äußerlich nicht vereinende Mensch.	NHG	agreement	
20	In der Uebergangszeit, und zwar vom 1. Oktober 1903 bis 1. Oktober 1908, kann der Reichskanzler in Uebereinstimmung mit der Landescentralbehörde diejenigen Kandidaten ganz oder teilweise von der Ableistung des praktischen Jahres entbinden, welche die Prüfung nach den alten Vorschriften bestanden haben, und bei denen zwingende persönliche Verhältnisse vorliegen.	NHG	agreement	

AGREEMENT	Example	Language	Frame 1	Frame 2
21	Daladier verlas einen Artikel der kommunistischen "Humanité" und erwähnte den Kommunistenkongreß vom Jahre 1936, der das Einvernehmen **mit** allen zum Ausdruck brachte, die den Frieden wünschten, mit Einschluß des Faschistischen Italiens und des nationalsozialistischen Deutschlands.	NHG	agreement	
22	... die Aufgabe hat, "die Einheit Europas zu fördern und die fortschreitende Integration zu unterstützen" und daß dieses Ziel mit den Aufgaben des Europarats übereinstimmt, wie sie im Artikel I von dessen Statut niedergelegt sind; in Anbetracht des Wortlautes des neuen Artikels IX dieses Vertrages:	NHG	agreement	
23	Einen Mitosetypus, der mit dem der Metazoen weitgehend übereinstimmt, stellen die Kernteilungen dar, welche der Gametenbildung der Gregarinen vorausgehen.	NHG	agreement	
24	Es wird nicht resignieren, und es wird sich mit der ihm aufgezwungenen Spaltung niemals abfinden.	NHG	agreement	

AMALGAMATION	Example	Language	Frame 1	Frame 2
1	In dhes æuuiste »sitzit pardus mit gheizssinu « , bauhnit dhea nidhigun chimenghide **mit** sundigem . Dhar auh » chalp « fona dheru iudæischun	OHG	amalgamation	
2	thaz ist erreckit hamalstat , Gabun imo gimirrotan uuin trinkan **mit** gallun gimisgitan , inti mit diu her es corota ,	OHG	amalgamation	
3	is Jhesus Christus dar umbe kuomit id mit suozicheide zuo deme herzin want de allersuoziste de heet dit gemengit **mit** siner suozer salven also heizet he selve salvende In einer zit sprach he ouch ein wort duo he viele sprach	MHG	amalgamation	
4	die menge dar zvo gestozzen ingeber . vnd ein wenic enys guez daz in einen vesten moerser der heiz si **mit** dem selben crute daz tuo du zvo den eyern da mit bewirf die huenre . vnd tuo die huenre in	MHG	amalgamation	
5	geroestes brotes tuo pfeffer dar zvo vnd ingeber daz ez scharfp werde vnd nim ein wenig anis vnd mal daz **mit** ezzige vnd mit honicsaume vnd erwelle ez biz ez dicke werde vnd laz ez kalt bliben vnd lege dor in	MHG	amalgamation	
6	zvo mazzen vnd laz ez erwallen in dem condiment vnd gib z hin . Ein geriht . Rib knobelauch mit saltze die haubt / schele schone vnd menge sehs eyer dar zvo on daz wisse vnd nim ezzig vnd ein	MHG	amalgamation	
7	du machen einen agraz . Nim wintruebele . vnd stoz sur ephele . diz tuo zvosammene . menge ez mit wine . vnd drueck es vz . dise salse ist guot zvo scheffinem braten . vnd zvo huenren . vnd	MHG	amalgamation	
8	vischen / . vnd heizet agraz / . aber ein condiment . Nim aschlauch vnd schel n rib in . **mit** saltze meng in mit wine eder mit ezzige vnd drueck ez vz dise salse ist guot zvo rinderinen braten Ein	MHG	amalgamation	
9	heizet agraz / . aber ein condiment . Nim aschlauch vnd schel n rib in . mit saltze meng in **mit** wine eder mit ezzige vnd drueck ez vz dise salse ist guot zvo rinderinen braten Ein salse . Nim sure	MHG	amalgamation	
10	einem moerser alse sie veiste beginnen so sprenge dor vf ein kalt wazzer vnd stoz sie vaste vnd menge sie mit kaldem wazzere eben dicke	MHG	amalgamation	

AMALGAMATION	Example	Language	Frame 1	Frame 2
	vnd rink sie durch ein schoen tuoch vnd tuo die kafen wider in den moerser stoz			
11	zwei haubt knobelauches die groz sint vnd schele die schone vnd stoz sie mit ein wenic saltzes vnd menge daz **mit** der milich vnd mit den totern vnd saffran tuo dar zvo . vnd guez daz condiment vf die gans .	MHG	amalgamation	
12	groz sint vnd schele die schone vnd stoz sie mit ein wenic saltzes vnd menge daz mit der milich vnd **mit** den totern vnd saffran tuo dar zvo . vnd guez daz condiment vf die gans . laz sie erwallen vnd	MHG	amalgamation	
13	ab ez niht fleischtac ist / vnd gib z hin . Ein guot gebackenz . Rib kese menge den mit eyern vnd scharbe gesoten spec dar zvo mache ein schoenen derben teyc vnd fuelle den kese vnd die eyer dor	MHG	amalgamation	
14	einen bersich gebeizt in ezzig . vnd wirf in denne in milich die do si von mandel gemachet / . **mit** rismele wol gemenget / . vnd ein wenic smaltzes dor in geton . vnd mit / erwellet / daz	MHG	amalgamation	
15	fladen von fischen gemachet wisze welher leie sie sint . hechede oder bersige geworfen in eine dicken mandelmilch wol gemenget mit rysmele . vnd ein apfel dor in wuerfeleht gesniten . vnd ein wenic smaltzes dor in geton . vnd	MHG	amalgamation	
16	vasten gerete . so nim vische vnd back es in smaltze vnd guez dor veber ein dicke mandelmilch wol gemenget **mit** rismele . vnd tuo eyn wenig smaltzes dr an . vnd meng ez wol mit wuertzen . vnd lege	MHG	amalgamation	
17	dicke mandelmilch wol gemenget mit rismele . vnd tuo eyn wenig smaltzes dr an . vnd meng ez wol **mit** wuertzen . vnd lege daz vf ein blat von teyge vnd laz ez backen . vnd versalt z niht /	MHG	amalgamation	
18	mandelmilich . vnd tuo also vil epfele als der vische ist vnd snide sie dor vnder . vnd meng ez mit ein wenic rismeles . daz ist guot zvo gefuelten krapfen . Einen krapfen . So du wilt einen vastenkrapfen	MHG	amalgamation	
19	sie in einem moerser . vnd nim epfele als vil vnd snide sie dr in wuerfeleht . vnd menge sie mit wuertzen welher ley sie sin vnd fuelle daz in die krapfen . vnd lege sie in ein pfannen . vnd	MHG	amalgamation	

AMALGAMATION	Example	Language	Frame 1	Frame 2
20	snide sie wuerfeleht / als der kern ist vnd roest sie wol mit ein wenig honiges . vnd meng ez **mit** wuertzen vnd tuo ez vf die bleter die do gem=aht sin zvo krapfen . vnd loz ez backen vnd versalt	MHG	amalgamation	
21	erweiz . Wilt du machen behemmische erweiz so nim mandelkern . vnd stoez die gar cleine . vnd meng ez **mit** dritteil als vil honiges . vnd mit guoten wuertzen wol gemenget / so er allerbeste hat / . die koste	MHG	amalgamation	
22	so nim mandelkern . vnd stoez die gar cleine . vnd meng ez mit dritteil als vil honiges . vnd **mit** guoten wuertzen wol gemenget / so er allerbeste hat / . die koste git man kalt . oder warm .	MHG	amalgamation	
23	mus mit lauche Ein muos mit lauche . nim wizzen lauch vnd hacke in cleine . vnd meng ez wol **mit** guoter mandelmilich . vnd mit risemele . vnd wol gesoten aber ein vastenmuos gemachet wol mit mandelmilich	MHG	amalgamation	
24	mit lauche . nim wizzen lauch vnd hacke in cleine . vnd meng ez wol mit guoter mandelmilich . vnd **mit** risemele . vnd wol gesoten aber ein vastenmuos gemachet wol mit mandelmilich . vnd wol gemenget mit	MHG	amalgamation	
25	mit risemele . vnd wol gesoten aber ein vastenmuos gemachet wol mit mandelmilich . vnd wol gemenget **mit** rismele . vnd daz suede wol vnd versalt z niht . Ein colris Ein colris ris gebacken .	MHG	amalgamation	
26	in ein suezze milich . vnd nim semelbroet . vnd snit daz wuerfeleht dor in . vnde meng ez mit eyertotern . vnd sued ez wol . vnd tuo ein smaltz dor vf vnde versalt z niht / . Ein	MHG	amalgamation	
27	vf vnde versalt z niht / . Ein colris . Aber ein colris nim eyger . vnd zeslahe die mit semelmele . vnd zeslahe daz . duenne kuochen geworfen in ein milich . vnd wol geruert biz ez gesiede	MHG	amalgamation	
28	daz . duenne kuochen geworfen in ein milich . vnd wol geruert biz ez gesiede . vnd meng ez aber mit eyger=totern . vnd tuo ein smaltz dr in . vnd gib z hin aber ein colrys . Aber ein	MHG	amalgamation	
29	ein milich . vnd nim einen apfel . vnd snit den wuerfeleht / dr in . vnd ruer ez wol mit eyertotern . vnd laz ez sieden wol vnd gib z hin . Ein kuetenmuos . Wilt du machen ein	MHG	amalgamation	

AMALGAMATION	Example	Language	Frame 1	Frame 2
30	die / vnd snide sie in ein kalt wazzer . vnd suede sie in einem hafen . vnd menge sie **mit** wine . vnd mit smaltze . vnd ze=slahe eyer mit wiz vnd mit al . vnd tuo daz dor zvo	MHG	amalgamation	
31	sie in ein kalt wazzer . vnd suede sie in einem hafen . vnd menge sie mit wine . vnd **mit** smaltze . vnd ze=slahe eyer mit wiz vnd mit al . vnd tuo daz dor zvo . vnd daz ist	MHG	amalgamation	
32	vnd suede sie in einem hafen . vnd menge sie mit wine . vnd mit smaltze . vnd ze=slahe eyer **mit** wiz vnd mit al . vnd tuo daz dor zvo . vnd daz ist gar ein guot fuelle / vnd	MHG	amalgamation	
33	in einem hafen . vnd menge sie mit wine . vnd mit smaltze . vnd ze=slahe eyer mit wiz vnd **mit** al . vnd tuo daz dor zvo . vnd daz ist gar ein guot fuelle / vnd versalt z niht	MHG	amalgamation	
34	. So du wilt mandelkuochin machen . so mache von mandelkerne guote milch vnd suet die vnd ruere die abe mit eime zuckere vnd schuet daz vf ein tuoch . vnd ein schaub dr under . vnd mache ein teyc von	MHG	amalgamation	
35	einen hafen vnd saltz es niht ze vil . vnd sied ez biz ez trucken werde . vnd menge ez mit einer mandelmilich . vnd ruer z ein wenic biz daz ez aber siede vntz im sine dicke kumme . vnd	MHG	amalgamation	
36	. vnd ruer z ein wenic biz daz ez aber siede vntz im sine dicke kumme . vnd geb z mit eime zucker dar . daz ist auch guot . ein muos von rise . Der woelle machen ein rysmuos	MHG	amalgamation	
37	ein muos von rise . Der woelle machen ein rysmuos der nem aber gestoezzen mandelmilich . vnd menge ez mit rismele . vnd sied ez wol vnd nim einen apfel vnd snit den wuerfeleht / . vnd roest den	MHG	amalgamation	
38	der neme dicke mandelmilch . vnd huener brueste geceyset . vnd tuo daz in die mandelmilch . vnd ruere daz mit rismele . vnd smaltz genuoc . vnd zuckers tuo genuoc dar zvo . daz ist ein blamenser Einen blamensir	MHG	amalgamation	
39	gezeiset / huener brueste / vnd wirf die in die milich . vnd der welle sie / vnd ruer sie **mit** rysmele / vnd mit eyertotern . vnd smaltz gibn genuoc / . vnd strauwe dor vf zuckers genuoc	MHG	amalgamation	

AMALGAMATION	Example	Language	Frame 1	Frame 2
40	519. , sein heyllige prust lassen durchstechen , aufdas er sych in sy czug vnd gancz mit im verainiget (.) jtem sych das mynsam mynsam . hercz xpin an alls k das	ENHG	amalgamation	
41	818. anderer / muesse sich auß breiten durch die gantze Welt / , obwoln er schon mit den Ketzern vnnd vnglaubigen Voelckern vnterspickt vnnd vermischt ist ; , wie er sich dann	ENHG	amalgamation	
42	1992. vmb dise deine vnaussprechliche wolthaten ewiges lob vnd danck / (.) vnd nachdem du dich mit vnserem armen flaisch vnd bluot verainiget / vnd auch mir vnwürdigen dise deine wolthaten durch	ENHG	amalgamation	
43	"Der letzte Akt im Spektakel um die Fusion von Daimler-Benz mit Messerschmitt-Bölkow-Blohm (MBB) war zugleich der langweiligste.	NHG	amalgamation	
44	Dieses **mit** Mayonnaise anrühren und die sehr fein geschnittenen Gurken, die restlichen 2 Scheiben Lachs, Zwiebel und Oliven dazugeben, mit Salz und Pfeffer abschmecken und die Eier damit füllen.	NHG	amalgamation	
45	Daß im übrigen die Erforschung von Idealvorstellungen nicht mit der Setzung einer politisch relevanten Versorgungsnorm verwechselt werden darf, sei hier nur am Rande vermerkt.	NHG	amalgamation	

ATTRIBUTE	Example	Language	Frame 1	Frame 2
1	Intfiengun sie tho thes heilantes lichamon inti buntun ínan mit sabonon **mit** biminzsalbun , soso uuísa ist Iudon zi bigrabanne .	OHG	attribute	
2	Hierusolimis , inti mittiu see gisahun sume fon sinen iungoron mit unsubren hantun , thaz ist ni giuuasganen hantun , ezzan	OHG	attribute	
3	daz meinet daz da uurstesot diu tiure minna uber al , der goteliche wîstuom , mit allemo wolewillen . Siu ist in goldes sconi , samo	OHG	attribute	togetherness
4	erdcunnu , inti gisehent mannes sun comentan in himiles uuolkanon **mit** managemo megine inti mihilnesse . Thanne sentit sine engila mit	OHG	attribute	
5	in , thio uuisun uuarlihho intfiengun oli in iro faz mit liohtfazzon . Tuuuala tuonti themo brutigomen naffezitun allo inti sliefun	OHG	togetherness	attribute
6	megine inti mihilnesse . Thanne sentit sine engila mit trumbun **mit** mihileru stemmu , inti gisamanont sine gicoranon fon fior uuinton	OHG	accessory	attribute
7	mán , der dir giuuárnôt ist mit allên dûgeden , **mit** mínne , mit driuûon , mit allero reinnussedo , den	OHG	accessory	attribute
8	. in . t . ꝑ . ꝑ . c . et . r . Er sprichet also . Vrovvve **mit** diner scone . unt mit dinem sconen bilde . so chum vvr unt vvis chuniginne in dem hi=melriche . Disiv	MHG	attribute	
9	ꝑ . ꝑ . c . et . r . Er sprichet also . Vrovvve mit diner scone . unt **mit** dinem sconen bilde . so chum vvr unt vvis chuniginne in dem hi=melriche . Disiv scone div was nivth aine	MHG	attribute	
10	gelichot in du bist selbe chunch miner un got miner du bivtest heil iacobes in dir uiant unser wir iagen mit horne un in namen din wir uersmaehen die sich irhebent uber uns nieht ovch in bogen minem ih getruwe un	MHG	attribute	
11	van der uriheite . un rehte ze nemene . unde ze tuonne den lueten . So ein eigelich geistlich leuin mit priui=leigen . un uriheitin des stuoles uan rome . si uzgenomen . uan wertlicheme gerigthe . so is dat billich	MHG	attribute	
12	. unde iedoch . so man etzelichen dienest . der seichen in den spitalen . unde ouch des vie=hes . **mit** wiues namen baz . dan mit man=nes namin berihtet . so si erlovuet dat . dat ir zu susgetan dieneste	MHG	attribute	

ATTRIBUTE	Example	Language	Frame 1	Frame 2
13	man in . uzwendech der wonun=gen der bruodere bereiten . ir wonunge want dei kuschecheit des begeuenin mannes . dei mit den wiues namen wonet . ovf si lihte behalden wirt . doch is si nith siecher . vnde mach ouch	MHG	attribute	
14	. unde gescheffede . nith ur=boren aittermales . cleider sulen sie dra=gen . uan geistlicher uaruen . unde nith **mit** dem ganzen cruce . unde ovf si sizent mit der . er . swer ir ee stiruet . dat halfe	MHG	attribute	
15	burger dem Rihter niht antwrten sol vmb keyner ley getat der man im schulde gibt . diweil der clager **mit** dem rehten niht clagt . vnd wenne auch der clager mit dem rehten clagt . vnd daz iener mit dem	MHG	attribute	accessory
16	man im schulde gibt . diweil der clager mit dem rehten niht clagt . vnd wenne auch der clager **mit** dem rehten clagt . vnd daz iener mit dem rehten vellig wirt der da beclagt wirt . so sol der	MHG	attribute	accessory
17	clager mit dem rehten niht clagt . vnd wenne auch der clager mit dem rehten clagt . vnd daz iener **mit** dem rehten vellig wirt der da beclagt wirt . so sol der rihter fragen di scheppfen waz seins rehten dar	MHG	attribute	accessory
18	vnde al der xp̄n=heit zv troste vnd zv genaden . wa=ne als huote wolde er ersten von me to=de . mt deme selben libe den er duorch vns zv der marter gab . er zvbrach die helle vnd bant den	MHG	attribute	accessory
19	wol gemenget / so er allerbeste hat / . die koste git man kalt . oder warm . Ein mus mit lauche Ein muos **mit** lauche . nim wizzen lauch vnd hacke in cleine . vnd meng ez wol mit guoter	MHG	attribute	material
20	. Swanne uerscaidet ain bruoder . oder ain swester . alder z ainer iarcit . so sprih dise uigilie . mit den langen leccen . Salm unt antifn . suoch der nah . Oder den . Da nah sinc die uesp̄	MHG	attribute	partitive
21	genzeliche geheizen . so sal ime der ouferste onf hei da gegenwortihc is . ovfe der prister . den manteil **mit** deme cruce geuen . der da gesegenet si . mit der gewonlicher senungen . unde mit deme wihewazsere besprenget .	MHG	attribute	togetherness

ATTRIBUTE	Example	Language	Frame 1	Frame 2
22	noch schribit . sente matheus In der czit . sprach ihesus czu synen iungeren . alse des menschen sun ku=myt **myt** syner macht . vnde alle syne engele myt ym . so syczit her uf den stul syner gewalt . So	MHG	attribute	accessory
23	zuo sente Clemente ich haven dat gepruoft dat deme menschen niet unmuogelich in is he in muoge dar zuo kuomen mit langir uovingin inde **mit** guoder gewoinheit dat weis ich da bi Hie bi vuormails du ich mines meister wort hoirde	MHG	attribute	cause
24	. diz heizzent huenre von rinkauwe vnd gib z hin . Ein guot spise . Man sol ein huon braten mit spec gewuelt / vnd snit denne aht sniten arme rittre vnd backe die in smaltze niht zvo truege vnd schele	MHG	instrument	attribute
25	der morgenstunde dat wir quemen zuo siner scholen Dit wort sprach bischof Albret wir suolen kuomen mit gesamindin sinnen inde **mit** offenen oren inde mit hangindin herzen mit urlove gesprochen also virleckert dat wir ingeiner ander scholen in begerin dat	MHG	manner	attribute
26	quemen zuo siner scholen Dit wort sprach bischof Albret wir suolen kuomen mit gesamindin sinnen inde mit offenen oren inde **mit** hangindin herzen mit urlove gesprochen also virleckert dat wir ingeiner ander scholen in begerin dat is dat wir ingeine	MHG	manner	attribute
27	Sis du die werilt ane na diner genuogeden ove einich dinc die in der werilde sint zuohantz steis du mit eime unkuizheme herzin vuor Gode nochdandat du nie me unkuiz in wurdes an me live nochdan heizes du	MHG	accessory	attribute
28	gab in da bi bilde . daz wir alle er=sten suln an me iungistin tage **mit** deme selben libe vnd mt der selben sele als wir nv schinen . Daz er ersten solde von me tode . vnd vns alle mit	MHG	accessory	attribute
29	. daz iz keine frucht brachte . abir daz in dy gute erde vil . daz synt dy . dy mit eyme guten herczen . vnde myt eym allirbesten herczen gotes wort horen . vnde behalden vnde vort brengen in dy	MHG	accessory	attribute
30	. abir daz in dy gute erde vil . daz synt dy . dy mit eyme guten herczen . vnde myt eym allirbesten herczen gotes wort horen . vnde	MHG	accessory	attribute

ATTRIBUTE	Example	Language	Frame 1	Frame 2
	behalden vnde vort brengen in dy gedult an dem vritage dor noch			
31	in sine menscheit . vnd gab in da bi bilde . daz wir alle er=sten suln an me iungistin tage **mit** deme selben libe vnd mt der selben sele als wir nv schinen . Daz er ersten solde von me tode	MHG	accessory	attribute
32	1234. gon altkilch , gon enszhin (.) was von basel was , dz ein fenlin hatte mit der stat jngesihel , korn vnd anders zuo reichen , wer des telfins fenlin hatte	ENHG	attribute	
33	1235. der stat jngesihel , korn vnd anders zuo reichen , wer des telfins fenlin hatte mit dem sigel , soltend sicher sin (.) in der sicherheit vnd geleit wart manig biderman	ENHG	attribute	
34	1990. ... etliche ſchöne hiſtorien/ auß dem alten Testament genomen / , zuo sehen / , die von gemusierter arbait / mit jren farben wol vnd künstlich eingelegt : vnd noch so guot zu erkenen seind /	ENHG	attribute	
35	2254. die zwey loegelin mit Balsam / vnd an seinen halß eyn schweren schilt / , **mit** stahel fast wol beschlagen / , in der mitte den Gott Appollo habent / (.)	ENHG	attribute	
36	2306. nymmer mocht , zuo dem pferd / vnd nam derselbigen schwerdter eyns / , welches mit dem namen hieß Batime / , das het eyn breyte vnd lichte schneid / (.)	ENHG	attribute	
37	2730. da fieng der Sudenwindt/ de[...] doch in der zeit jares nit vil pflegt zu regieren / , an zu wehen / mit eynem solchen donner vnd fewr / , dz eym schrecken ward / (.) vnd das	ENHG	attribute	
38	1175. uff [COMMA] liesß die drige in , bslussend grendeltor , machtend sich uff den turn mit geschutz (.) begert der Hoebtman sin vingend , men wolt es nit tuon (.) er	ENHG	attribute	accessory
39	483. (.) sing mit schallen , dye perg werden tropfen dye suesigkayt vnd dye puchel fliesen **mit** mylych vnd honig (.) allan got sagen wyr danck ewigklych amen (.) der xxiij tag	ENHG	attribute	containment
40	1988. ist / , das nit bald dergleichen zuo finden . Dann jenwendig die gantze Kirchen mit schoen weißfarben Marmelstainen	ENHG	attribute	material

ATTRIBUTE	Example	Language	Frame 1	Frame 2
	gepflestert / vnd mit so uilen gantz Marmorin hohen vnd grossen seulen			
41	673. seiner haußfrauen Vatters bruoder ware / , dem wolt er seine khinder beuoelhen / derselb mit seiner schickligkhait vnnd manhait wurde die khinder seine fründt / wissen vnd mügen bey der	ENHG	attribute	means
42	1207. alban in den kilchoff , das vnsaglichen ist c (.) domitte kam ein samlich hagelwetter **mit** schiblechten steine{6} , ein teil als huerneyer , ein teil mit antlidren , nam alles	ENHG	attribute	partitive
43	617. zu seinem Brueder zu uerfueegen / (.) ein ander , auch des Jaropolkhen Rath , mit namen WARESCO [COMMA] , der wider rieth das / (.) dem ward nicht geuolgt /	ENHG	attribute	
44	620. gleichßnereyen / vnd ainhaimische krieg hoeren . (.) WOLODIMER , des Sewalden Sun / , mit dem zunamen Monomach / , hat das Reissen Land widerumben in ain Herrschafft vnder sich	ENHG	attribute	
45	448. mayen fur dye thur deiner allerlyebsten muetter marya , dye dyssen schonen mayen an vntterlos mit waineten augen vnd grossem herczenlaid hat an gesechen , da die frucht jrs junckfreulichen leybs	ENHG	attribute	manner
46	2710. gar keyn windt etliche tage / , dann in der nacht kamen offtmals grosse donnerwetter mit regen vnnd windt / , erhuoben sich bald / , vergiengen auch bald / (.)	ENHG	attribute	partitive
47	604. Volodimer zu ainem Fuersten erworben / , Da zu Neugarten was ain Burger oder Jnwoner mit namen CALVWTZA , der khlain / , der hete zwo Toechter / , DOBRINA vnd	ENHG	attribute	
48	2000. der Araber vberlauff gar groß / , zimlich verwaret . (.) Bethlehem liget hoch / mit dem gebürge Iudeae vmbgeben / , wie solchs auß den worten Ieremiae am 31 Cap	ENHG	attribute	
49	831. es ein andern bescheid / , dieweil damahlen auß Gottes sonderbahrem außtrucklichem befelch der Messias mit seinen Guthaten durch allerley Bilder vnd Schatten muessen fuer gebildet werden / , Hebr .	ENHG	attribute	togetherness

ATTRIBUTE	Example	Language	Frame 1	Frame 2
50	2008. , Hettan genant / , morgens frue zuo raysen / , da dan ein Gart mit wasserbechen lustig vnd reich war . (.) Dahin zohe nun der Koenig vmbs lusts willen	ENHG	containment	attribute
51	571. pegyrt vnd wurt entczunt in der lyeb der hymelyschen vnd ewigen dingen vnd wurt erfullt mit vnaussprochlycher suesigkayt des heylligen geysts vnd wurt in in ein prunen des lebentigen wasers entspringen	ENHG	containment (meta)	attribute
52	2331. Heyden ranten alles fuersich / nach jrem gefallen / (.) Keyser Karle dorfft den Heyden mit der macht nit lenger nach eilen / , wann er besorgt sich einer Halden oder	ENHG	manner	attribute
53	611. . mit hinderlisten vm bracht / vnnd aus desselben Hiernschallen ein Tringkhgefaeß gemacht / , **mit** Gold beschlagen / , vnd mit puechstaben darein setzen lassen dise maynung . (:) Frembdes	ENHG	material	attribute
54	630. sich des Regiments gantz vnder standen / , aber nit wie jr gewonhait ist / mit jren Clainaten getziert / noch ein gesetzt / vnnd hat seinen Tauffnam Gabriel veraendert /	ENHG	material	attribute
55	Es hat eine Wasserverdrängung von 7 500 t über und 9 000 t unter Wasser, wird mit 16 Abschußrohren für Polaris-ähnliche Raketen **mit** einer Reichweite von rund 2 000 km und Kernsprengköpfen mit einer Stärke von je 500 Kilotonnen versehen sein und eine Mannschaft von 136 Mann aufnehmen.	NHG	attribute	
56	Es gibt aber auch keine ähnlichen Figuren, was man sich klar machen möge, indem man versucht, etwa zu dem Dreieck **mit** den Endpunkten Nordpol und den Schnittpunkten des Äquators mit dem Null- und dem 90. Meridian ein ähnliches zu finden.	NHG	attribute	
57	Die Vorstellung von den **mit** dem Roten Kreuz gezeichneten und mit Betten und Decken und Öfen ausgestatteten Waggons hatte die gemarterten Gehirne erfaßt.	NHG	attribute	
58	Dort standen ehrwürdige alte Männer mit langen weißen Barten, barhäuptig, in verbeulten, alten, schwarzen Anzügen, lächelten und schüttelten einander herzlich die Hand.	NHG	attribute	

ATTRIBUTE	Example	Language	Frame 1	Frame 2
59	Brandschimmel, weißes Pferd mit dunkeln Flecken.	NHG	attribute	
60	Ein Wort, das jedem Literaten, dem doch all das Gerede der führenden Staatsmänner plump und undifferenziert erscheint, ein Reden mit ausgedruckten Gummistempeln, aus der Seele gesprochen ist.	NHG	attribute	
61	Skete (Skiti, abgeleitet von Sketis in Oberägypten), dorfähnliche Mönchsansiedlungen mit aszetischen Lebensformen in Abhängigkeit von Klöstern; eine der Hauptformen des Mönchslebens im Orient; die Bewohner heißen Skitioten, die Vorsteher Dikäos.	NHG	attribute	
62	Sie alle waren nur Diener, mit Fleiß und Gehorsam, und jede Wolke war mächtiger als ihr Wille.	NHG	attribute	
63	Nachtaffe (Nyctipithecus), Gattg. der Breitnasen, mit sehr großen eulenähnlichen Augen, kleinem, rundlichem Kopf, kleinen Ohren, buschigem, mehr als körperlangem Schwanz; hintere Gliedmaßen länger als die vordern; Pelz weich.	NHG	attribute	
64	Bronzefiguren der Cola- Zeit, bes. jener anmutig graziöse Typ mit doppelter Biegung der Körperhaltung (Tribhanga), wobei die rechte Hand zur Aufnahme eines Gegenstandes (z.B. Lotosstengels) erhoben ist (katakahasta), während der linke Arm frei herabhängt (lola-hasta; P., Bronze, 11./12. Jh., Washington, Freer Gall.	NHG	attribute	
65	Den höchsten Preis erzielte mit 8400 Mark Maifeuer; Maifeuer, schon erprobt (er gewann am Sonntag eine Materialprüfung), kommt an den Tattersall Beermann zu A. Staek in Vorbereitung.	NHG	attribute	
66	Dies dreckige Bauernleben mit seiner ewigen schweren Arbeit wär' ihr schon lange zuwider!	NHG	attribute	
67	Die Exzellenz, ein älterer Herr mit einer milden Pontiac-Nase, wie Fontane das nannte, führt den Vorsitz.	NHG	attribute	

ATTRIBUTE	Example	Language	Frame 1	Frame 2
68	Die Toranlage besteht aus 2 vierstöckigen rechteckigen Türmen **mit** halbrunder Außenfront (9 m breit, 20 m tief, 29 m hoch), die zusammen mit 2 sie verbindenden, parallel zueinander angelegten dreigeschossigen Tortrakten (17 m lang, jeweils 2 große Tore) einen rechteckigen zwingerartigen Hof einschließen.	NHG	attribute	
69	In dem Augenblick, als die Nation sich befreit fühlte von dem erzwungenen Frieden **mit** seinen moralischen und politischen Bedrückungen, als gleichzeitig eine Entwicklung, unter der das deutsche Volk seit 700 Jahren nur gelitten hatte, mit dem Niedergang des Partikularismus überwunden wurde, ist die Bahn frei geworden, um die deutsche Geschichte wieder als Ganzes zu betrachten und darzustellen.	NHG	attribute	
70	Für ihn hatte die goldstrahlende Märchenstadt **mit** ihren Unsterblichkeit und üppigsten Fruchtsegen spendenden Lebensbäumen dieselbe Realität wie für den Propheten, der ihn im Falle des geringsten Zweifels mit dem Ausschluß von dieser Wonnestadt und zudem noch mit furchtbaren Strafen bedrohte.	NHG	attribute	
71	Ein quadratischer, schwarzer, mit rostbraunen Haaren durchsetzter Vollbart bedeckte die Wangen bis zu den Augen - aber nicht das war es, was die Veränderung hervorgerufen hatte, sondern eine geheimnisvolle, von innen wirkende Kraft, die zu begreifen wir nicht fähig sind.	NHG	attribute	
72	wenn die Welt sich jetzt ihrer Verantwortlichkeit für Vietnam besinne, könne das auch deshalb sein, weil man diese Lektion gelernt habe und weil die großen Mächte sich entschlossen hätten, Vietnam mit all seinen Bitternissen und seinem Zauber den Vietnamesen zu überlassen).	NHG	attribute	
73	Ohne Versailler Vertrag keine Reparationen - ohne Reparationen kein wirtschaftlicher Zusammenbruch mit den besonders für Deutschland katastrophalen Folgen, wie sie in einer Arbeitslosenziffer von fast sieben Millionen ihren Ausdruck fanden - und ohne	NHG	attribute	

ATTRIBUTE	Example	Language	Frame 1	Frame 2
	diesen Zusammenbruch keine Machtübernahme durch die Nationalsozialisten.			
74	Mit blossem Kopf redet er auch zu einem Höheren.	NHG	attribute	
75	Der D. ist rechteckig mit beträchtl. Umfang (bis 50 x 40 m).	NHG	attribute	
76	Helga mit auf- und abblühenden Pusteln, Szymaniak mit der Zunge, die die falschen Stellen peitscht im luftzerkauenden Lispelmund, Agathe **mit** dem Bleizahn, Tilly von, die hygienische Hexe, führte die Kolonne, ritt singend auf Ampullen, denen sie kreischend die Glashälse absägte, voran, dirigierte den Chorus vom blitzblanken Boden und die weiße Litanei der Visitenprozession, die mit sich führte die gläserne Ente, die Klistierspritze, den Holzlöffel, das elektrische Messer und dergleichen Embleme.	NHG	attribute	
77	In Gebieten mit langem und warmem Herbst kann Zuckermais bis Anfang Juli ausgesät werden.	NHG	attribute	
78	Es mißfiel ihm, wie der Mensch dalag, so auf das Gesicht geschleudert, **mit** einem Nacken, der wie gebrochen aussah, und mit ausgebreiteten Armen.	NHG	attribute	
79	Zur Definition (Produkte mit Molgewichten über 10000) vgl. J. W. Hill, W. H. Carothers, Journ. amer. chem. Soc. 55, 5023 (1933).	NHG	attribute	
80	Gegenüber der Kirche das "Schloß" von Lankwitz **mit** seiner fast endlosen Fensterreihe , mit welcher ein witziger General die Zahl der Fenster seines Nachbars vis à vis übertreffen wollte ... - Aber Schloß Lankwitz ist noch älter als die Inschrift über dem schweren Eisenportal besagt, dieses gibt 1767 als Baujahr an.	NHG	attribute	

ATTRIBUTE	Example	Language	Frame 1	Frame 2
81	Wird ihnen ein neues Amt übertragen, so erhalten sie die Amtsbezeichnung des neuen Amtes; gehört dieses Amt nicht einer Besoldungsgruppe **mit** mindestens demselben Endgrundgehalt (§ 26 Abs. 1 Satz 2) an wie das bisherige Amt, so dürfen sie neben der neuen Amtsbezeichnung die des früheren Amtes mit dem Zusatz " außer Dienst " (" a. D.	NHG	attribute	containment
82	Dann begeht die junge Frau aus falscher Schamhaftigkeit törichte Sachen, die natürlichen Bedürfnisse des Körpers werden vernachlässigt und mit fast zum Springen gefüllter Blase und Darm geht und fährt sie von Ort zu Ort.	NHG	attribute	manner
83	Die Oberin tat einen seltsamen Satz und schnappte mit weit geöffnetem Mund wie eine dicke, schnellende Schleie nach den kurzen, schnurrenden Sätzchen, welche Eustachia entließ; dann fiel sie, ohne ein Wort zu sagen, in die Sammetpolster zurück und griff nach dem Rosenkranzkreuz.	NHG	attribute	manner
84	Zum Kulturgebiete der Urpuner, der Himyariten und Sabäer gehörte auch Mashonaland mit seinen uralten Goldbergwerken und Ruinen.	NHG	attribute	
85	Oper mit Uraufführungen von André, Benda, Schweitzer und Reichardt.	NHG	attribute	
86	In vollem Bewußtsein, daß das Reich auf seiner Seite ist und daß es bis zuletzt alles getan hat, um diesen völlig sinnlosen, ihm aufgezwungenen Krieg zu vermeiden, wird Deutschland mit der gewaltigen Wucht seiner ganzen Volkskraft diesen Krieg zu Ende führen.	NHG	attribute	
87	Ein Zug des ordnenden lateinischen Geistes wird bei Tertullian spürbar, wenn er ausführlich auf Fragen der äußeren Gebetsordnung eingeht wie etwa die Gebetszeiten - er kennt das Morgen-, Abend-, Tischgebet und das Gebet um die 3., 6. und 9. Stunde - und die körperliche Haltung des Beters, der mit erhobenen und ausgebreiteten Händen beten soll, weil er so den leidenden Herrn am Kreuz nachbildet 84 .	NHG	attribute	

ATTRIBUTE	Example	Language	Frame 1	Frame 2
88	Diese Höherschätzung wird **mit** 84 Milliarden durch das erhöhte Einkommensniveau begründet und mit 52 Milliarden durch neu vorgeschlage Steuern.	NHG	attribute	
89	Wie da gerungen wird; wie da versucht wird, das Gute von außerhalb zu adoptieren und das Eigne zu bewahren - und wie aussichtslos das alles ist, wie uneinheitlich, wie durchsetzt mit Romantik, Phrase, verhülltem Katholizismus (der gefährlicher ist als der offene) - machtlos verbluten diese kleinen Gruppen unter den Mächtigen der Stadt und der Provinz.	NHG	containment	attribute
90	Ebenso schwärmerisch offenbart Clemens Kleinschmidt sein Wissen Beton und Panzer brechende Explosionskörper damals und heute betreffend, von der 13-kg-Flammstoffbombe **mit** Benzinfüllung, über den steuerflugtauglichen Napalmcontainer oder das mit Treibladung gefüllte, nach dem Prinzip der Hohlladungsgranate konstruierte Rohr mit aufgesteckter Munition - die gute, alte Panzerfaust - bis zu der wie ein rückstoßfreies Geschütz funktionierenden Bazooka.	NHG	containment	attribute
91	Ein langer Präfekt in schwarzem Rock; große, gewölbte Korridore, auf deren Steinfliesen die Schritte hallten; eine breite Treppe; der weite Studiersaal der Lateinschüler, **mit** den dreizehn Pulten, jedes zu vier Plätzen; hinter dem Studiersaal der Kastenflur mit den zweiundfünfzig Schränken, unter denen ich die Nummer Elf bekam.	NHG	containment	attribute
92	Aber ein Zimmer mit so viel Gegenständen wie das unsrige hält sich nicht selbst in Ordnung.' Daraufhin hat Delamarche nachgedacht, was sich da tun ließe, denn eine beliebige Person kann man natürlich in einen solchen Haushalt nicht aufnehmen, auch zur Probe nicht, denn man paßt uns ja von allen Seiten auf.	NHG	containment	attribute
93	Etwas langsamer, sonst aber ähnlich wie der Salpeter, wirkt das schwefelsaure Ammoniak, mit etwa 20,5% Stickstoff, das im Boden durch salpeterbildende Bakterien weiter in Salpeter umgewandelt wird, wenn es nicht	NHG	containment	attribute

ATTRIBUTE	Example	Language	Frame 1	Frame 2
	vorher als Ammoniak von den Pflanzen schon aufgenommen wurde.			
94	Der Bau von Kleinwohnungen mit 1-3 Wohnräumen nimmt zu.	NHG	containment	attribute
95	In der Nähe von Lyon ist gestern ein mit drei jungen englischen Studenten besetztes Automobil beim Ueberholen eines anderen Kraftwagens ins Gleiten gekommen und gegen einen Baum geschleudert worden.	NHG	containment	attribute
96	Wie Johann mit ausgestreckten Armen das Rad halte, das gefalle ihr.	NHG	instrument	attribute
97	Silberplattierte Gegenstände sind aus anderem Metall mit aufgewalzter Silberschicht.	NHG	material	attribute
98	In einem andern waren eine Menge winziger Hüte aller Zeiten und in allen Formen und Farben aufgeschichtet, und wieder ein anderer enthielt einen ganzen Bienenkorb aus Wachs, mit feinen wächsernen Blumen verziert, darauf Bienen von der gleichen Materie saßen.	NHG	material	attribute

CAUSE	Example	Language	Frame 1	Frame 2
1	so siner upiler uuillo ist , uzzan so uilu so uuir mit dineru ensti upærqhueman megin .	OHG	cause	manner
2	gachoron , soso sin uuillo si , uzzan soso uuir **mit** dinera anst enti mit dinem ganadon ubar uuehan mekin .	OHG	cause	means
3	oder an dem arme oder an den avgen der sol ienen geben cehen pfvnt ze pezzervnge Vnd ob mer leme mit ainem schlage / geschiht an ainen arm oder an ainem fvoze oder an ainer hant oder an ainen pain daz	MHG	cause	means
4	sol ez auch fuer ain leme pezzern vnd allewege dem Rihter sin reht voraus . Gesche=hen aber zwo leme mit ainen schlage an baiden armen an baiden handen an baiden fvozen oder an baiden pain daz sol man auch pessern	MHG	cause	means
5	mt der selben sele als wir nv schinen . Daz er ersten solde von me tode . vnd vns alle mit siner heiligen vferstandunge solde ir=ledigen . daz hatten vil siner heiligen ꝑphen lange vor gesagt in den alden ge=ziten	MHG	cause	means
6	zuo sente Clemente ich haven dat gepruoft dat deme menschen niet unmuogelich in is he in muoge dar zuo kuomen mit langir uovingin inde **mit** guoder gewoinheit dat weis ich da bi Hie bi vuormails du ich mines meister wort hoirde	MHG	attribute	cause
7	anderswa . da man ein gemachet spitail wolte geuin deme hus . mit sime gelte . da mohte der landescomeduer **mit** deme raite der wizegestin bruodre . dat niman . oder lazen . In anderen huseren disses ordenes . di ane	MHG	means	cause
8	so groz chost zuo den siechen ge=horet . so mach man . uan der uerlihunge der priuileigin des ordenes . mit sunder=licheme urloue des meisteres . oue des lant=comdures . bittere der almvosen . den siechen . uiz senden die geistliches	MHG	means	cause
9	dat ir zu susgetan dieneste . wiues namen . zuo hal=phenswesteren enphaet . dei seluen sal man dovch nith wan mit des lantcomndures urlovue enphaen . unde so si enphangen sint . so sal man in . uzwendech der wonun=gen der	MHG	means	cause
10	. sal inchein bruoder . uzwendech des huses ezzen . it en si danne underwilen . uan sunderlicheme urlovue . **mit** ꝑlaten . oue mit	MHG	means	cause

CAUSE	Example	Language	Frame 1	Frame 2
	geistlichen lueten trinken muogen si douch mit den seluen . Ist dat zwene bruodere . oue			
11	. unde sal doch dat selue lihen miden . so hei mit fuogen mach . it en si danne . **mit** urlouve . des meisters . oue des lantcomndures . Inchein bruoder sal riden selue ander uf eime pherde .	MHG	means	cause
12	da ordene . als laze wir ouch zuo ime . die erze=te ze hauene . in disen uor genantin spita=lin mit der wiser bruodre rate . Doch sol man dat sorcueldecliche bewaren . dat in allin spi=talin . den siechen .	MHG	means	cause
13	641. , das er am Tisch entschlaffen ist / (.) Seine Gest seind in der zeit mit forchten still gewest / (.) So er aber entwacht / , seine augen auß geriben	ENHG	cause	
14	832. zwang / , kein verdienstlich Werck drauß gemacht / vnd daß das Christliche Volck nicht mit vilen Ceremonien vber haufft oder beschwaert / vnnd darbey das nothwendige vnderlassen werde: dann vil	ENHG	cause	agentive
15	689. Erhalt den vnder deiner beschuetzung vnd im Reich damit er jederzeit guottes vnnd gebuerlichs handl thue / , damit in seinen tagen die gerechtigkhait erscheine mit erweiterung seiner herrschafft . Vnnd das in rhuoe vnd stille on zwitracht in aller guete	ENHG	cause	concurrence
16	Die Bezugspräferenzen werden von bisher 5 % auf 11 % erhöht, davon bleiben landwirtschaftliche Güter mit Rücksicht auf Lieferungen aus den EWG-Ländern unberührt.	NHG	cause	
17	Mit der Entwicklung der visuellen Sinneswahrnehmung und des Auges als Distanzrezeptor engstens verbunden, ist der F. nicht nur Produkt der biolog., sondern auch der sozialen Entwicklung des Menschen.	NHG	cause	
18	Die drei Beteiligten seien sich darin einig gewesen, den Sachverhalt mit Rücksicht auf den König und die Münchener Öffentlichkeit vorläufig geheim zu halten, was ihnen aber je länger, desto unerträglicher geworden sei.	NHG	cause	
19	Rousseau und Marx glaubten mit dem Blick auf ihn und seine rationalistische Struktur, durch	NHG	cause	

CAUSE	Example	Language	Frame 1	Frame 2
	eine Theorie den "Lauf der Welt" ändern zu können.			
20	Wir können uns mit unseren Beobachtungen einer aggressivmotorischen Verhaltenskomponente bei den Arbeiterkindern den Ergebnissen McNeils (1960) anschließen, der den Zusammenhang von Klassenzugehörigkeit, Erziehungspraxis und expressivem Stil zuerst formulierte.	NHG	cause	
21	Ich hatte doch tatsächlich die absurde Vorstellung, daß ich mich mit jeder Entscheidung nur festlegen würde.	NHG	cause	concurrence
22	Aber die konfessionelle Landkarte veränderte sich sehr rasch mit der Beschleunigung der angelsächsischen missionarischen Durchdringung 29 , die um 1825 eingesetzt hatte.	NHG	cause	concurrence
23	Früher hörte es im Grunde mit dem Adel und den Juristen auf.	NHG	cause	concurrence
24	Die Weiterbildung dieser Kader erfolgt zum Beispiel am Zentralinstitut für Sozialistische Wirtschaftsführung beim ZK der SED (ZSW), an den Industrieinstituten oder in Sonderklassen an den Hoch- und Fachschulen, die für langjährige Parteiarbeiter eingerichtet wurden mit dem Ziel, diesen Personenkreis in einem 2jährigen Studium zu Diplom-Ingenieuren, Diplom-Ökonomen oder staatlich geprüften Landwirten auszubilden.	NHG	concurrence	cause
25	Zum Schluß verweist er darauf, daß der deutsche Einfluß auf die werdenden Städte in Ungarn nicht mit den ersten Stadtprivilegien, sondern mit dem weit früheren Eindringen deutscher Fernhändler in das Land beginnt.	NHG	concurrence	cause
26	**Mit** den Städten entstand der Typ des Laienhandwerks, bald in Zünften organisiert (Lukasbruderschaften), mit dem 13. Jh. beginnen uns auch Hofmaler und höf. Architekten entgegenzutreten.	NHG	concurrence	cause
27	Zum Präsidenten der Vollversammlung wurde mit den Summen von 58 Delegationen der indische Vizepräsident Dr. Sarvepalli Radhakrishnan gewählt.	NHG	means	cause

CAUSE	Example	Language	Frame 1	Frame 2
28	Weil das Großhirn sich erst vor kurzem entwickelt hat und anatomisch recht homogen gebaut ist, nur wenige Zelltypen enthält und mit standardmäßigen Verbindungsmustern auskommt, ist es vielleicht leichter zu verstehen als ältere, stärker optimierte Teile des Nervensystems.	NHG	means	cause
29	-- Eine Resolution 3520 (XXX) vom 15. Dezember 1975, die mit 10 gegen 1 Stimme (Israel) bei 26 Enthaltungen (darunter die meisten westlichen und lateinamerikanischen Staaten) angenommen wurde und die Weltkonferenz des internationalen Frauenjahrs betrifft (19558 A); es wird von den Beschlüssen von Mexico Kenntnis genommen und der Zeitraum 1976 bis 1985 zum UN-Jahrzehnt für Frauen proklamiert.	NHG	means	cause
30	Mit rund 1,9 Millionen Kunden liegt man weit vor der Konkurrenz.	NHG	possession	cause

CIRCUMSTANCE	Example	Language	Frame 1	Frame 2
1	mag heil uuesan ? Scouuuonti ther heilant quad in : mit mannon thiz ist unodi , **mit** gote alliu sint odi	OHG	circumstance	
2	heilant quad in : mit mannon thiz ist unodi ,	OHG	circumstance	
3	Tho quad her in : ír birut thie dar íúuuíh rehtfestigot fora mannon : got uueiz íúuuariu herzun , bidiu thaz mit mannon hoh ist , thaz ist leidlih fora gote .	OHG	circumstance	
4	ginennit Barabbas . In tho gisamanoten quad Pilatus : ist mit íu giuuona thaz ih íu einan forlazze in ostron : uuenan uuollet ir thaz ih íu forlázze , Barrabban oda then heilant	OHG	circumstance	
5	thar ginemnit ist unberenta : bithiu uuanta n ist unodi mit gote íogiuuelih uuort . Thô quad Maria : seno nu	OHG	circumstance	
6	Inti gihôrtun thaz thô ira nahiston inti ira cundon , thaz truhtin mihhilosota sína miltida **mit** iru , inti gifahun mit iru . Uuard thô in	OHG	circumstance	
7	unser herre do sprach auer pylatus Qerd faciam de ihun qui dicitur xenꝑc- ? daz spricht waz sal ich tuon mit ihcen den man dar heizet cristus ? do rifen die iuoden gemeine beide groz vnd cleine iz si recht	MHG	circumstance	
8	626. (.) DEMETRIVS , als er merckte / , das die Vnderthonen vnd gemain des Adls mit jme nit zufriden waeren / vnd on vnderlaß sich von jme zu dem plindten Basilio	ENHG	circumstance	
9	816. nit dahin samptlich / , da sie so viel nutzen schaffen koenden ? (?) dann mit vns ist es ohn von noethen / , wir wissen Gottes Wort / vnd die	ENHG	circumstance	
10	830. beweiß finden koennen in der H . Schrifft / , sonderlich Newen Testaments: (.) dann mit dem alten Testament hat es ein andern bescheid / , dieweil damahlen auß Gottes sonderbahrem	ENHG	circumstance	
11	2728. in den hauingen komen / , dann sie weren des hauingen kuendig / (.) aber mit solchem sturmwetter / , wie wir darin komen weren / , wüsten sie nit darein	ENHG	circumstance	
12	Wie steht es mit der Gegenliste ?	NHG	circumstance	
13	Mit dem "Ehrenwort",dem großen wie dem kleinen, sind junge Menschen oft sehr leicht bei der Hand.	NHG	circumstance	

CIRCUMSTANCE	Example	Language	Frame 1	Frame 2
14	Wesentlich anders steht es mit der nächsten Angabe, daß unter Euthydemos (korrekt Euthynos, 450/49) auf Antrag des Perikles die Verlegung des Bundesschatzes von 5000 Talenten von Delos nach der Akropolis beschlossen worden sei.	NHG	circumstance	
15	Aber hören Sie **mit** dem Gemansche mit Menschen auf, die keine Menschen und keine Soldaten mehr, die wirklich nichts anderes als blinde Rösser sind, oder wenn Sie wollen, blinde Kühe, mit vertrocknetem Euter, mit Pusteln, knochenbrüchig und voller Geschwüre.	NHG	circumstance	
16	Alissa stimmt sie weigert sich einzuschlafen bevor er neben ihr sie neben ihm sicher hat sie ihn gehört trotzdem sollte er ein Geräusch jetzt Lärm machen irgendwie hätte schon an der Wohnungstür mit der Lautlosigkeit Schluß machen sollen	NHG	circumstance	
17	Sie haben niemals mit ihrer Machenschaft zur Schaffung von ‚2 China' aufgehört, noch haben sie ihre aggressiven Ambitionen auf Chinas Provinz Taiwan aufgegeben.	NHG	circumstance	
18	**Mit** geradem Streifen oder Schrägstreifen ist ein Schlitz mit akkurater Spitze folgendermaßen zu arbeiten: Jedem Schlitzrand wird ein etwa 3 cm breiter Streifen, rechts auf rechts liegend, nahtbreit aufgesteppt, unten 3 cm breit überstehend.	NHG	circumstance	
19	**Mit** jedem einzelwissenschaftlichen Bereiche führen neue und unableitbare Voraussetzungen sich ein, in jedem werden die Probleme der ihm vorgelagerten mit derselben Nachdrücklichkeit als gelöst betrachtet, mit der die Unabschließbarkeit ihrer Auflösung in anderem Zusammenhange behauptet wird.	NHG	circumstance	
20	Seine apparativ gemessenen Unterbrechungen werden mit Ausnahme der Fütterungspausen von den Eltern in der Regel nicht wahrgenommen.	NHG	circumstance	

CIRCUMSTANCE	Example	Language	Frame 1	Frame 2
21	Nach der Beendigung der fortgesetzten Gütergemeinschaft gelten die Vorschriften der §§ 743, 744 mit der Maßgabe, daß an die Stelle des Ehegatten, der das Gesamtgut allein verwaltet, der überlebende Ehegatte, an die Stelle des anderen Ehegatten die anteilsberechtigten Abkömmlinge treten.	NHG	circumstance	
22	Startete die Videokassette mit der Love Parade	NHG	containment	circumstance

COLLABORATION	Example	Language	Frame 1	Frame 2
1	Gab her imo dugidi , Fronisc githigini , Stuol hier in Urankon . So bruche her es lango ! Thaz gideild er thanne Sar mit Karlemanne , Bruoder sinemo , Thia czala uuunniono . So So thaz uuarth al gendiot , Koron uuolda sin god	OHG	collaboration	
2	So sezzet min ein magitin dar tes tiris uard ist. So ez si gesihit , so lofet ez ziro . Ist siu denne uuarhafto magit , so sprinet ez in iro parm unde spilit mit iro . So chumit der iagere unde uait ez .	OHG	collaboration	
3	menigi : meistar , quid minemo bruoder thaz her teile mit mir erbi . Her quat imo thó : mán ,	OHG	collaboration	
4	Thie fon thir sihuues bite , gíb imo , inti thie thár uuolle mit thír uuehslon , ni uuidaro iz thanne . Inti thie	OHG	collaboration	
5	fon henti allero thie unsih hazzotun , zi tuonne miltida mit unsaren faterun inti zi gihugenne sinero heilagun giuuiznessi , thero	OHG	collaboration	
6	Inti sie ni forstuontun thaz uuort thaz her sprah zi in , inti nidar stigenti mit in quam zi Nazareth , uuas in untar thiutit .	OHG	togetherness	collaboration
7	giburitun . Inti uuard thó , mittiu sie sprachun inti **mit** ín suohtun , Inti ther selbo heilant nahlichonti gieng mit	OHG	collaboration	communication_exchange
8	sin in munde minem . in got wirt gelobt sele min horen die senften un frowen sich lobet unseren herren mit mir un erheben namen sinen in daz selbe . ih suhte got un er irhorte mih un uz allen noten	MHG	collaboration	

COLLABORATION	Example	Language	Frame 1	Frame 2
9	helpen mach inde dat wieder den richdum is inde wieder die ere Dit siet ir wale an den die umbegeint **mit** vuorkoufe inde mit dieseme wine inde mit diesen corne alse man iezuo alle die liste hait vuonden die dar wieder	MHG	collaboration	
10	dat wieder den richdum is inde wieder die ere Dit siet ir wale an den die umbegeint mit vuorkoufe inde **mit** dieseme wine inde mit diesen corne alse man iezuo alle die liste hait vuonden die dar wieder sint so vindent	MHG	collaboration	
11	vluz Gar ane menlichen schuz Und ane swere geborn Wand dv hast des vater zorn Hin geleit in grozer list Mit der martyr mittewist Des lobe wir in sinnen Dich here vz vnd innen Daz dv vns so meisterlich Kanst leren	MHG	collaboration	
12	546. deinem allerheyligesten herczen verdienen czw wanen alle die tag meines lebens , vnd das jch **mit** einander mug sechen vnd volpringen deinen wolgefalligen wyllen (.) alls vmbstock dein mayenpedlein mit den	ENHG	collaboration	
13	688. Metropolit dier ainigen ewigen Khuenig / dem auch das jrdisch beuolhen / , Naiget euch mit vnns / , () spricht , () bittet / den , der alles regiert /	ENHG	collaboration	
14	814. vnd jhnen das Land auß theilen . (.) Vnnd die Kauffleuth Babylon werden handthieren / mit allerhand koestlichen Wahren / c , Apoc . 18 . (.) Censur . (:) Diß	ENHG	collaboration	
15	1226. wurdent vil erslagen (.) donoch komend su in das hus , das stiesßend die schinder mit dem landadel an , das vil zuo	ENHG	collaboration	

COLLABORATION	Example	Language	Frame 1	Frame 2
	beden sitten verbrent , erslagen wurdent (.) do			
16	628. der ain Sun was EMANVELIS des Khuenigs zu Constantinopl / , des geschlechts der PALEOLOGORVM [COMMA] , mit der er fuenff Suen erworben / , GABRIELN [COMMA] , DEMETERN [COMMA] , GEORGEN [COMMA]SIMEON vnd ANDREEN	ENHG	collaboration	
17	618. Ludwigs zu Hungern vnd Poln Tochter / (.) Der aber vber kam das Kuenigreich Poln mit seiner Praut im 1383 . Jar . (.) SWATOPOLCH , der das Fuerstenthumb zu Khiow	ENHG	togetherness	collaboration
18	Der Kalahariführer Duncan und der uralte Hottentott Aufries sagten, sie seien schon einmal dort gewesen auf der Jagd mit Duncans Vater zusammen in einem guten Wasserjahre.	NHG	collaboration	
19	In diesem Zusammenhang machte ich unsere Unterstützung für diese Bemühungen und unsere engste Zusammenarbeit mit ihnen klar.	NHG	collaboration	
20	Der Verkehr mit Pilzen bedarf, bedingt durch die gifthaltigen, jedoch morphologisch in ähnlichen Formen auftretenden Pilzarten einer besonders spezifizierten Kontrolle.	NHG	collaboration	

COMMUNICATION_EXCHANGE Example		Language	Frame 1	Frame 2
1	fare . . . . imu ni erlauben kasprohchan uuesan mit kastu .	OHG	communication_ex	
2	Uuip , obe thu uuissis , uuielih gotes gift ist , unte den ercantis , mit themo du kosotis , tu batis dir unnen sines kecprunnen	OHG	communication_ex	
3	pilide Iacob . Vbe du frilichen gotes reht chosen uuellest mit den fursten dere uuerlte , so pilide Iohannem baptistam .	OHG	communication_ex	
4	imo ther heilant : thu gisahi inan , inti ther mit dír sprihhit , ér ist iz . Tho quad er	OHG	communication_ex	
5	After managen zitin quam ther herro thero scalco inti sazta reda mit in . Inti gieng zuo ther de fimf talenta intfieng	OHG	communication_ex	
6	thannez gitán uuerde, thaz ir iz giloubet . Iu ni managiu sprihu mit íu : cumit ther herosto thesses mittilgartes inti in mir	OHG	communication_ex	
7	sie uuarun gilerte , inti uuas tho gimarit thaz uuort mit then Iudeon unzan hiutlichan tag .	OHG	communication_ex	
8	...daz achiuuizfirinari der cuatchundento kistactem in erda augom quad: . . . . nipim uuirdiker ih sunsigo heffan augun miniu ze himile " enti auur mit uuizzagin : " kepoganer pim enti kedeonoter pim eogouueri .	OHG	communication_ex	
9	giburitun . Inti uuard thó , mittiu sie sprachun inti **mit** ín suohtun , Inti ther selbo heilant nahlichonti gieng mit	OHG	collaboration	communication_ex
10	443. wol czu schafen , pyst dise spyegelein alle ergiczt , den magst u wol sprochen mit dem profeten (:) meine augen hab jch auf gehobt in den perg , das ist	ENHG	communication_ex	
11	480. herr kumbt (.) er waist , wan es czeyt ist , so wurdt er sprochen mit dem werck (:) () es ist volpracht () , so er dych von allen	ENHG	communication_ex	

	COMMUNICATION_EXCHANGE Example	Language	Frame 1	Frame 2
	leyden erlo̊digen erlo̊digen wůrdt gedenck das nit dem anfachetē ſunder dem verharetē			
12	635. ist der Moscouiter grausamblich vmb gangen / , mit grossen Khetten beschwerlichen gehalten / , **mit** dem oebersten Haubtman Hertzog Constantin gehandlt / , jme zu dienen / , das er	ENHG	communication_ex	
13	741. setzen / , des cloesters nutz treulichen fürdern / , die handlungen vnd fuerfallende sachen mit dreyen oder viern der elltern brueedern beratschlagen / vnd solche beratschlagung für die gemain besamblung	ENHG	communication_ex	
14	747. briester durch den weltlichen Richter gestrafft . (.) Briester vnd Pharrer werden gemainclichen vndter halten mit der Besamlungen von pharleueten / (.) dartzue werden jnen Heuser / , Ackher / vnd	ENHG	communication_ex	
15	iſt mit dem zubeweiſen das der Juden Oster= mal ſteend gehalten vnnd geeſſen wordn das jn Chriſti nachtmal nit gehalten ward als die ſchrifft ſpricht lainend **mit** den zwelffen Jtem vn̄ der Junger lainete an ſeiner pruſt im abentmal dann da er ſprach mit begierd hab ich begert das Oſtermal mit	ENHG	communication_ex	
16	1230. Jten donoch am fritag zugend die schinder gon seggingen , lovffenberg , waltzhuot (.) woltend mit dem heltuom engegen sin gangen , sprochend , es werend botten von gotte (.) do	ENHG	communication_ex	
17	1273. was worend ſů erſtorben vnd Ruoff volrich schutz zuo den von basel gnedeklich vmb einen friden	ENHG	communication_ex	

COMMUNICATION_EXCHANGE Example		Language	Frame 1	Frame 2
	j stunt , mit jnnen zuo Reden , es halff nutz (.) vnd liessend iij buchsen usß , erschussend			
18	1274. gnedigen herren von basel [COMMA] farend Ritterlich an vns ! gend vns ein friden , mit uwer gnoden zuo Reden (!) () denne es stuende jnnen herte (.) das werte lange	ENHG	communication_ex	
19	1971. et c . (?) () So haben auch die liebe Engel auff dise weiß / mit den Aposteln reden / vnd sie Galileische Maenner nennen woellen / , sie alß fürsteher,1582,Der Artzney Doctorn vnd bestelten Medici zu Augspurg,westoberdeutsch,T	ENHG	communication_ex	
20	2727. gegen dem abendt kam eyn grosser Nache voll wilder leuth bei das schiffe vnd wolten mit vns reden . (.) Aber vnser keyner kundte die sprach wol verstehen / (.) Wir	ENHG	communication_ex	
21	3795. wort vanitatem tragen , Alß Ecclesiastes am vi capitell ist sagen (.) Dorumb hat Paulus mit den Aposteln conferyrt Seyn Ewangelium und nicht disputyrt , Wan Cismata werden nicht geendt Durch	ENHG	communication_ex	
22	Bei meinen Konferenzen mit Hitler-Speer ist der Modus über die Arbeiterfrage überhaupt nicht zur Sprache gebracht worden.	NHG	communication_ex	
23	Ich berufe mich auf den anwesenden Frhrn. v. Berger, der mit dem Privatkläger schon im November von dem einen Artikel gesprochen und ihm vollständig in das Gesicht gesagt hat, was die Sache bedeutet.	NHG	communication_ex	

COMMUNICATION_EXCHANGE Example		Language	Frame 1	Frame 2
24	Daß der Ausländer auch diesmal richtig beobachtet hatte, bestätigte mir an dem Tage, wo ich ihn wieder zur Bahn brachte, eine Fahrt in der Elektrischen: der Schaffner gebrauchte auf der kurzen Strecke (in der Unterhaltung mit einem befreundeten Fahrgast) die Wendung nicht weniger als dreimall Sie ist natürlich noch viel törichter als das blöde Allerhand, und so bleibt zu hoffen, daß beide an der eignen Sinnlosigkeit über kurz oder lang verrecken werden.	NHG	communication_ex	
25	Sie lacht, sie winkt nach allen Seiten und tauscht fröhliche Rufe mit völlig Unbekannten.	NHG	communication_ex	
26	Sie sei allein wie er, und sie möge sich nicht zieren und wenigstens nett mit ihm plaudern.	NHG	communication_ex	
27	Er sagte, die Unterrredungen mit den verschiedenen Gesprächspartnern seien konstruktiv verlaufen, wollte aber nicht auf Einzelheiten eingehen.	NHG	communication_ex	
28	Dadurch war ich mit Anton Memminger in Verbindung gekommen, der erst das »Würzburger Journal« und dann den »Nürnberger Anzeiger« redigiert und durch seine kühne Kritik der öffentlichen Mißstände viel Aufsehen erregt hatte.	NHG	communication_ex	
29	Trotz der doppelzüngigen Haltung Kaundas sei er weiter an einem Gespräch mit ihm interessiert.	NHG	communication_ex	
30	Am 1. April 1945 trafen die alliierten Unterhändler mit Waibel und Husmann wieder in Ascona zusammen, um den durch Parrilli übermittelten Bericht Wolffs über seine mittlerweile unternommenen Schritte entgegenzunehmen.	NHG	communication_ex	

COMMUNICATION_EXCHANGE Example		Language	Frame 1	Frame 2
31	»Um 10 Uhr vormittags begaben sich Glaise-Horstenau und ich ins Bundeskanzleramt und konferierten etwa 2 Stunden mit Dr. Schuschnigg.	NHG	communication_ex	
32	Jescha, der Heidengott, und die andern, Pomian, Swist Powist, haben lange geredet, über die Balkenwand herüber, auf dem Erdwall gesessen, geredet mit dem alten Hausgeist Chowaniec, der nun hereinkommt, an der Seite zwischen den beiden Türangeln, und hinaufspringt unter den Dachbalken.	NHG	communication_ex	
33	Der Ausgesetzte durfte mit niemandem - bei Strafe - Umgang haben.	NHG	communication_ex	
34	- Als mir 1938 die Verhaftung wegen «nahen Umgangs mit jüdischen Personen» drohte, hielt ich es für geraten, das Tagebuch nicht nur zu verstecken, sondern einige Passagen überhaupt zu vernichten.	NHG	communication_ex	
35	Im Umgang mit Hongkong wird sich Chinas weltpolitische Rolle zeigen	NHG	communication_ex	

CONCURRENCE	Example	Language	Frame 1	Frame 2
1	ther mih santa , fater . Thisu sprah ih íu mit iu uuonenti . Ther fluobareri heilac geist , then der	OHG	concurrence	
2	Ibu huuaz ist kepotan, nalles stozzonto , nalles uualo , nalles trago edo **mit** murmulode edo mit antuurtu des ni uuellentin ist kitan ,	OHG	manner	concurrence
3	. Tho gieng zi imo thíu muoter thero kindo Zebedéuses mit iro kindon betonti inti bát sihuuaz fon imo . Her	OHG	togetherness	concurrence
4	, trohtin ? Then quad er : ther de thuncot mit mir sina hant in thesa scuzzilun ther selit mih .	OHG	togetherness	concurrence
5	. Tho quad imo Petrus : zisperi oba mir gilimphit mit dir zi sterbanne , thanne ni forlougnu thin . Sama	OHG	togetherness	concurrence
6	Tho uuarun erhangan mit imo zuene thioba , ein zeso inti ander in sina	OHG	togetherness	concurrence
7	ci sinen ebaniungiron : gemes uuir , thaz uuir sterben mit imo . Tho quam ther heilant inti fant inan fior	OHG	togetherness	concurrence
8	wirdecheit . der heiliger driualdechiet . So=wanne sie auer stent . so suelin sie . zuo deme glra patri nigen **mit** gemeinelicher neigun=gin des liues . Sie suolin ouch mit ulize huotin des . dat ieman . mit wispele oder mit	MHG	concurrence	means
9	wart der gahe tot gestillet . Do ge=bot sente gregorius . vber alle die werlt daz man disen tach beginge **mt** vas=tene . vnd mt cruocegange vor den gahin tot vnd vor alle not die in der xp̄nheit wre .	MHG	concurrence	means
10	gestillet . Do ge=bot sente gregorius . vber alle die werlt daz man disen tach beginge mt vas=tene . vnd **mt** cruocegange vor den gahin tot vnd vor alle not die in der xp̄nheit wre . Duorch daz heizet dirre	MHG	concurrence	
11	in der vinster=nisse daz du qemes . vnd vns er=lostes von des tuovels gewalt . vnd habn din dicke gewuonschit mt sufzene vnd mit weinende . Nv bis=t u cuom zv troste vnd zv genaden vns die in der helle habn	MHG	manner	concurrence
12	daz du qemes . vnd vns er=lostes von des tuovels gewalt . vnd habn din dicke gewuonschit **mt** sufzene vnd mit weinende . Nv bis=t u cuom zv troste vnd zv genaden vns die in der helle habn gelegen vil lange	MHG	manner	concurrence

CONCURRENCE	Example	Language	Frame 1	Frame 2
13	Swer aber den wirt oder sein wirtein oder ain ir kint haimsuocht daz er die vebele handelt in ir hause **mit** rovfenne oder mit schlahenne oder mit verwnden der gibt fvenfzic pfunt haller ze pvoze Swer aber den wirt haimsucht daz	MHG	means	concurrence
14	wirt oder sein wirtein oder ain ir kint haimsuocht daz er die vebele handelt in ir hause mit rovfenne oder **mit** schlahenne oder mit verwnden der gibt fvenfzic pfunt haller ze pvoze Swer aber den wirt haimsucht daz er in iaget	MHG	means	concurrence
15	stat hat in der ecclesien . wie lief er suele hauin rittere . un wie hei sei suele intpha=in . **mit** dem seningin in den schierme der ec=clesien . mit suonderlicheme gunste . un ouch bestetigin mit antlazin . un mit	MHG	means	concurrence
16	geuen . der da gesegenet si . mit der gewonlicher senungen . unde mit deme wihewazsere besprenget . want man **mit** deme cruce den abeit disses ordenes enphehet Wie man dei kint zuo diseme ordene sule entphain . Uvir willen ouch	MHG	means	concurrence
17	sin dat is alleine bekentenisse inde minne inde gebruoginge diese dru die sint mit uns ewich die andere stervent alle **mit** uns wat der is sunder diese dru die hevent hie ane inde werint eweliche mit uns wanne ich ein dinc	MHG	togetherness	concurrence
18	603. Sonder hat sich menigclich mit geselchten fleisch benuoegen muessen / (.) So hat er sich **mit** seinem Satl vnder seinem haubt auf der Erden ligund benuegt / (.) Er vber wand	ENHG	concurrence	
19	744. oder hanndlete , steet dem geistlichen gericht zu richten / (.) Wo aber deren ainer mit Diebstall / , Trungkhenhait oder andern weltlichen vnschickligkhaitn betretten / , wirdt durch das weltlich	ENHG	concurrence	
20	746. Boyarn geschlagen solten sein / (.) Vor wenig Jaren hat des groeßfuersten Statthalter ainen briester mit diebstall betretten / , hengkhen lassen / (.) Des sich der Metropolit beschwaert / ,	ENHG	concurrence	
21	2263. gedranck oder anders / dan mit freiem streit vnd hefftiger were erober / (.) () **mit** denen worten / liessen sie jre pferd zusamen lauffen / , jetzlicher des tratzigen gemuets,	ENHG	concurrence	

CONCURRENCE	Example	Language	Frame 1	Frame 2
22	2265. / , das er mir lebendig vnnd gesundt / wider erheym komme / (.) () **mit** diesen worten ging er , sein antlitz mit seinem mantel bedeckent , in die Cappel,	ENHG	concurrence	
23	1250. genon (.) der furst was selb jm hus , liesß x knechte ab ziechen (.) mit knuwen erbotten su in vmb das leben , doch su muestend sweren , wider die	ENHG	concurrence	manner
24	2283. vf das er behalten werde / (.) () vnd **mit** diesen worten zeychnet er sich mit seinem schwerdt / mit dem zeychen des heyligen Creutzes / in dem namen Gottes vnd	ENHG	concurrence	
25	2328. grossem geruff / baten sie Gott vnd all heyligen / vmb huelff / (.) vnnd mit trutzigen worten rannt Ruland / Corsubeln in die brust / , Gerhard von Mondidier traff	ENHG	concurrence	
26	689. Erhalt den vnder deiner beschuetzung vnd im Reich damit er jederzeit guottes vnnd gebuerlichs handl thue / , damit in seinen tagen die gerechtigkhait erscheine mit erweiterung seiner herrschafft . Vnnd das in rhuoe vnd stille on zwitracht in aller guete	ENHG	cause	concurrence
27	843. Kirchen examinirt vnd approbirt seyn worden . (.) Wann aber etliche gewesen / , die mit falschen vnnd erdichten Wunderzeichen auff gezogen / , muß man darumb alle Wunderzeichen verwerffen oder	ENHG	manner	concurrence
28	442. den lustlichen spyegelein der manigfalltigen aygenschaft dys freud geveten mayen Do Grues dissen holltselligen mayen mit dem helligen sannck andreas , des augen auch erstart warn in dissen heylligen creucz ,	ENHG	means	concurrence
29	2295. zuo dall / vnd hieb dem pferd den hals ab , also , das Oliuier mit seinem pferd fiele / (.) er stund vff sein fueß / , aber es war	ENHG	togetherness	concurrence
30	452. , ist , das du dych verpergen sollt vntter den schaten der pleter , die mit dysser plune her and prosen (.) eya wen dyr hays ist von der hycz der	ENHG	togetherness	concurrence
31	In diesen Fällen wechselt die Straßenbaulast für die Ortsdurchfahrten, wenn sie bisher dem Bund oblag, **mit** Beginn des dritten Haushaltsjahres nach dem Jahr der Gebietsänderung, sonst mit der Gebietsänderung.	NHG	concurrence	

CONCURRENCE	Example	Language	Frame 1	Frame 2
32	»Gnädiger Herr, die Traurigkeit ist zwar nicht für Tiere, sondern für Menschen gemacht; allein wenn die Menschen ihr über alles Maß nachhängen, so werden sie zu Tieren«, mit diesen Worten wendet sich Sancho an Don Quichote.	NHG	concurrence	
33	Mit den Städten entstand der Typ des Laienhandwerks, bald in Zünften organisiert (Lukasbruderschaften), **mit** dem 13. Jh. beginnen uns auch Hofmaler und höf. Architekten entgegenzutreten.	NHG	concurrence	
34	Giordano (eigentlich Filippo) Bruno, 1548 zu Nola geboren, trat **mit** 15 Jahren in den Dominikanerorden, verließ ihn aber, als er wegen seiner freien Anschauungen beargwöhnt wurde, und führte seit 1576 ein unstetes Wanderleben von Ort zu Ort, überall mit dem ganzen Feuer seiner leidenschaftlichen Natur für seine Ideen eintretend.	NHG	concurrence	
35	Mit der Gründung des geeinten Reiches ging die Einteilung des Staatsgebiets in sechsunddreißig Kommanderien ein her; die Eroberung neuen Gebiets im Nordwesten und im Süden ließ ihre Zahl auf über vierzig ansteigen.	NHG	concurrence	
36	Am 21. Oktober wurde laut The Times ein Arabischer Mineralöl-Kongreß **mit** einem Appell an die Ölgesellschaften abgeschlossen, in eine positive Partnerschaft auf Basis der Gleichberechtigung mit den arabischen Produktionsländern einzutreten.	NHG	concurrence	
37	Sollte es ja einmal nicht möglich sein, **mit** dem Glockenschlage anzutreten, so hat sich der Verspätende mit größter Artigkeit zu entschuldigen.	NHG	concurrence	
38	Die Weiterbildung dieser Kader erfolgt zum Beispiel am Zentralinstitut für Sozialistische Wirtschaftsführung beim ZK der SED (ZSW), an den Industrieinstituten oder in Sonderklassen an den Hoch- und Fachschulen, die für langjährige Parteiarbeiter eingerichtet wurden mit dem Ziel, diesen Personenkreis in einem 2jährigen Studium zu Diplom-Ingenieuren, Diplom-Ökonomen oder staatlich geprüften Landwirten auszubilden.	NHG	concurrence	cause

CONCURRENCE	Example	Language	Frame 1	Frame 2
39	Zum Schluß verweist er darauf, daß der deutsche Einfluß auf die werdenden Städte in Ungarn nicht **mit** den ersten Stadtprivilegien, sondern mit dem weit früheren Eindringen deutscher Fernhändler in das Land beginnt.	NHG	concurrence	cause
40	**Mit** den Städten entstand der Typ des Laienhandwerks, bald in Zünften organisiert (Lukasbruderschaften), mit dem 13. Jh. beginnen uns auch Hofmaler und höf. Architekten entgegenzutreten.	NHG	concurrence	cause
41	Schöne Literatur tauchte **mit** jahrzehntelanger Verspätung auf, und an »weltlichen« Büchern kamen zwischen 1840 und 1850 nur drei »öfter« in Nachlässen vor: Gellerts Fabeln und Schillers Gedichte sowie Knigges »Umgang mit Menschen« - nämlich je zweimal.	NHG	concurrence	manner
42	Unbemerkt von der Öffentlichkeit begann das Gauschulungsamt Berlin 1936 mit der Einrichtung der "Fliegenden Gauschule.	NHG	concurrence	means
43	Die Direktive wurde gleichzeitig mit einem Dokument "Grundsätzliche Ansichten des Komitees der Nationalen Einheit betreffend die Probleme, denen sich das Land gegenüber sieht" veröffentlicht.	NHG	concurrence	
44	»Ich nehme das mit,« stammelte sie **mit** zuckenden Mundwinkeln und war hinaus.	NHG	concurrence	manner
45	Ich hatte doch tatsächlich die absurde Vorstellung, daß ich mich mit jeder Entscheidung nur festlegen würde.	NHG	cause	concurrence
46	Aber die konfessionelle Landkarte veränderte sich sehr rasch mit der Beschleunigung der angelsächsischen missionarischen Durchdringung 29 , die um 1825 eingesetzt hatte.	NHG	cause	concurrence
47	Früher hörte es im Grunde mit dem Adel und den Juristen auf.	NHG	cause	concurrence
48	Mit Haß auf Franz ist sie gestorben, seine Stinkwut auf sie hat auch nach ihrem Tod nicht nachgelassen, ihr neuer Freund, der Breslauer, hat sie noch besucht.	NHG	possession	concurrence

CONCURRENCE	Example	Language	Frame 1	Frame 2
49	Wenn man weiß, daß alle Urteile auf vorher festgelegten Kategorisierungen, also auf Vor-Urteilen beruhen, muß die Vorurteilsforschung sich als Forschung über sich selbst erkennen; sie kommt mit ihren eigenen Vor-Urteilen (oder Vorurteilen?) in ihrem eigenen Gegenstandsbereich vor; sie kann, und muß, die Grenze zwischen normalen und kritisierbaren (aufklärbaren, wegtherapierbaren) Vorurteilen an sich selbst testen.	NHG	togetherness	concurrence

CONNECTION	Example	Language	Frame 1	Frame 2
1	nieman geben noch verkaufen noch antwuerten der ez von dem lande treiben welle . noch sol auch kain geselleschaft haben mit den der ez von dem lande treibet . swer daz bricht der gibt die vor genante pvoze dev auf daz	MHG	connection	
2	827. / , daß sie alhie allen Ketzern ein Spieß in den Augen ist / vnd mit jhnen allen die wenigste gmeinschafft hat noch haben will: vnd deßwegen von den Ketzern /	ENHG	connection	
3	Ihre Aufgabe ist, die Teilnehmer **mit** den Ideen des Marxismus-Leninismus, mit der Politik der Sozialistischen Einheitspartei Deutschlands (SED), insbesondere ihrer jeweiligen wirtschaftspolitischen Schwerpunkte, sowie mit den Aufgaben und Leistungen des FDGB auf verständliche Weise und unter Anknüpfung an die Alltagserfahrungen der Teilnehmer vertraut zu machen.	NHG	connection	
4	Der Betrachter kann diese Figuren nicht auf Distanz halten - was bei Raffael aufgrund ihrer Zugehörigkeit zur Norm möglich ist -, sie rücken ihm nahe, sprengen die hierarchische Struktur des klassischen Historienbildes, da sie von der Hauptszene ablenken, mit ihr direkt auch gar nichts zu tun haben.	NHG	connection	
5	Anfangs hat man die in Afrika beobachtete Krankheit mit der Malaria für identisch oder doch sehr nahe verwandt gehalten.	NHG	connection	
6	Dieser Verantwortung können sie jedoch nur gerecht werden, wenn sie schon in Friedenszeiten in die tägliche Arbeit einbezogen und mit ihren Aufgaben vertraut gemacht werden.	NHG	connection	
7	Mit ihnen haben es auf allen Gebieten die Spezialwissenschaften zu tun.	NHG	connection	
8	Aus diesem Aktenstück ergibt sich nicht, daß Kluge im Dienste der Gestapo gestanden hat, wohl aber daß er mit einer Gestaposache (beschlagnahmtes Judengut) zu tun hatte.	NHG	connection	
9	Ich habe mich mit ihm beschäftigt, Mama.	NHG	connection	
10	Ferner gibt es eine große Wissenschaft der Verhältnislehre, die eng mit der Eidologie zusammenhängt.	NHG	connection	

CONNECTION	Example	Language	Frame 1	Frame 2
11	Staatssekretär Klemm legte in der Sitzung des Kabinettausschusses Deutsche Einheit am 24. Juli 1990 »einen generellen Vorbehalt des BMF gegenüber finanzwirksamen Zusagen der Ressorts im Zusammenhang mit den Fachgesprächen« ein (Vorlage des Regierungsdirektors Lehnguth; Anm. 4).	NHG	connection	
12	Wenn nun unsere ganze DDR Ähnlichkeit mit meinem schönen BMW [hat], auf dem keine Garantie liegt, u. der von Anfang an in allen Knochen knackt?	NHG	connection	
13	Mit der rückwirkenden rückwirkenden von Gesetzen werde Schluß gemacht werden. (L B. Slowakische Fragen 2309 E, Außenpolitik 2318 E, Wirtschaft 2285 A, Kartelle 2323 E, Justizwesen 2014 H Kleine Entente 2182 D.)	NHG	connection	
14	Zwar fällt die Analogie des katholischen officium divinum mit dem chemischen magisterium ins Auge, doch bleibt auch der Abstand sichtbar.	NHG	connection	
15	Das hängt nun alles mit dem Blutkreislauf zusammen.	NHG	connection	
16	Sie ist am Ende mit ihrer Nervenkraft.	NHG	connection	
17	Ich meine, daß die Kritische Theorie ein provisorisches Ich der Kritik gefunden hat und einen »Standort«, der ihr Perspektiven auf eine wahrhaft einschneidende Kritik gewährte - einen Standort, mit dem herkömmliche Erkenntnistheorie nicht rechnet.	NHG	connection	
18	BM Genscher formuliert, die Verhandlungen hätten der Klärung von Fragen gedient, die wichtig für die 2+4-Verhandlungen im Zusammenhang mit der deutschen Vereinigung seien.	NHG	connection	
19	Ungarn werde auch in Zukunft bei der traditionellen Freundschaft mit Deutschland und Italien bleiben, die nicht nur den Krieg von Ungarn ferngehalten, sondern auch den Interessen der Mächte gedient habe, die eine Lokalisierung der internationalen Streitfälle wünschten.	NHG	connection	
20	Er ist auch am engsten verwandt mit der ursprünglichen Form des Tiefdrucks, dem Kupferstich.	NHG	connection	

CONNECTION	Example	Language	Frame 1	Frame 2
21	Der Bundesgerichtshof hat darüber hinaus ausgesprochen, daß das Recht der Ehefrau auf ungestörten Aufenthalt und ungestörte Betätigung in dem äußeren Ehebereich auch dann verletzt ist, wenn der Ehemann gegen ihren Willen in die Ehewohnung eine Haushälterin aufnimmt, die durch ihr Betragen die Ehefrau in ihrer Frauenwürde so erheblich verletzt, daß ein weiteres Zusammensein mit der Haushälterin für die Ehefrau unerträglich ist, mögen auch ehewidrige Beziehungen zwischen dem Ehemann und der Haushälterin nicht festgestellt werden können.	NHG	connection	
22	Städte sei das Hofkonzert in Weimar am 1. Dez. 1854 erwähnt, als sie mit Fr. Liszt bekannt wurden.	NHG	connection	
23	Ein gemeinsamer Entschließungsantrag von Koalition und SPD für ein bürgernahes und handlungsfähiges Europa erhielt 547 Ja-Stimmen (16 Nein, 6 Enthaltungen), eine weitere gemeinsame Entschließung zur Wirtschafts- und Währungsunion 546 Ja-Stimmen (15 Nein, 7 Enthaltungen), und die im Zusammenhang mit den Maastrichter Verträgen nötigen Änderungen des Grundgesetzes fanden die Zustimmung von 547 Parlamentariern (18 Nein).	NHG	connection	
24	Nicht wahr, Sie spielen auch mit dem Gedanken?	NHG	connection	
25	Bei einer politischen Annektion werden die Menschen gehört, sie werden Bürger, und sie bekommen ihre Abgeordneten, und man beschäftigt sich mit ihnen.	NHG	connection	
26	»Wie sieht es mit Waffen aus, ist da vorgesorgt?«	NHG	connection	
27	RABBANI verglich die Situation in Afghanistan unmittelbar mit der in den ehemals sowjetischen mittelasiatischen Republiken; diese Republiken eröffneten der ganzen islamischen Welt einen neuen Horizont.	NHG	connection	
28	In drei Bänden (herausgegeben 1975 bis 1978) beschäftigt sich der libysche Revolutionsführer **mit** der "Lösung des Problems der Demokratie", mit der "Lösung des ökonomischen Problems" und mit der "sozialen Basis der Dritten Universaltheorie" (nach Kapitalismus und Kommunismus).	NHG	connection	

CONNECTION	Example	Language	Frame 1	Frame 2
29	Diesmal, erklärte Hawa, habe es zu tun mit dieser Familienchronik, die er am Geburtstag nicht nur dem Alten, sondern auch der Öffentlichkeit übergeben möchte.	NHG	connection	
30	Die Vollversammlung faßte am 14. Dezember eine Resolution, in der sie darauf hinweist, daß die Organisation für Ernährung und Landwirtschaft der UNO sich mit diesem Vorschlag bereits befaßt habe, den Generalsekretär ersucht, die Organisation für Ernährung und Landwirtschaft einzuladen, einen Bericht an den Wirtschafts- und Sozialrat zu erstatten, wobei die Erörterungen anläßlich der Tagung der Vollversammlung und sonstige Vorschläge zu diesem Thema berücksichtigt werden sollen und den Wirtschafts- und Sozialrat ersucht, hierüber der Vollversammlung zu berichten.	NHG	connection	
31	Den kolonialen Weg, wo einer an alle Dinge und alle Menschen gerät und, wenn er mehr ist als ein Stubenvogel, auch den Zusammenhang und die Auseinandersetzung mit der noch ungebändigten und urwüchsigen Natur notwendig erlebt, konnte Grimm in der Heimat kein zweites Mal gehen.	NHG	opposition	connection

CONTAINMENT	Example	Language	Frame 1	Frame 2
1	. Thó quad ín ther heilant : fullet thiu faz mit uuazaru . Inti sie fultun siu únzan enti . Thó	OHG	containment	material
2	io uurde . After diu , do er gesatot uuard **mit** temo harme unde mit temo spotte unde mit uillon der iudon un er gecrucigot uuard	OHG	containment	
3	diu , do er gesatot uuard mit temo harme unde **mit** temo spotte unde mit uillon der iudon un er gecrucigot	OHG	containment	
4	euua gilerten ist ouh uúæ , bithiu ir ladet man **mit** lesti thia sie fortragan ni mugun , inti ir mit	OHG	affliction	containment
5	sprach he ouch van Job Des duovels vuorganc de deit dat mere wallen dat geschiet als he din herze vullit bit grozen bekoringen inde bedruofenisse So geis tu zuo unseme herren Gode of liethe an eine heimeliche stat vuor einen alter	MHG	containment	
6	in sin guote . hat so elliv mennisch erlediget uon aller ir note . Daz ist der tach den niemen **mit** lobe noch mit eren eruullen mach . er ist in den tagen des iares der oberst . in hat got	MHG	containment	
7	. hat so elliv mennisch erlediget uon aller ir note . Daz ist der tach den niemen mit lobe noch **mit** eren eruullen mach . er ist in den tagen des iares der oberst . in hat got selber geeret mit	MHG	containment	
8	un elliv werch sin mit triwen . er minnet die genade un daz rehte genade gotes folle ist div erde **mit** sinem worte die himele geuestent sint un mit geiste mundes sines elliv chraft ire er samnet als in einen buterich	MHG	containment	
9	559. pluots xpin (.) () o du sues sper , dye seyten xpin hat dych erfullt mit pluet (.) so dye sper vmbker wurd in dem herczen gottes , so werden alle	ENHG	containment	
10	1174. , volt uff die warte luogen , denne man meinde , do werend iiij wege{6} mit guot gelanden , woltend enweg (.) als brach der Hoebtman usß der Huott , Rant	ENHG	containment	
11	1127. Boeßlichen falschlichen gewunne{6} wart (.) Iten ano dem .xlviii. qarta p{5} luce komend .iiij. schiff mit bilgerin was der von Bechberg , Hadstad , ander edel lüttet bruoder lienharten , valckenstein	ENHG	containment	

CONTAINMENT	Example	Language	Frame 1	Frame 2
12	1980. hat Maria , die Schwester Lazari , jhme abermals nach etlichen verschienen tagen ein glas mit kostlichen Nardenwassers vber sejn haupt ab gegossen / , das daß gantze hauß vol guotes	ENHG	containment	
13	1981. die staig hinauff vber den Berg Gihon [COMMA] , für welchen hinein bald ein Cisterna mit guotem frischem wasser / am weg zuo sehen / , die von weissen stainen schoen	ENHG	containment	
14	2253. also versehen / saß Fierrabras zuo roß / vnnd hing neben sich die zwey loegelin **mit** Balsam / vnd an seinen halß eyn schweren schilt / , mit stahel fast wol	ENHG	containment	
15	2290. zuthal vff den Sattel / vnd zerschneyde die band / , damit die beyd laegelin mit dem Balsam an gehefftet waren / , also das sie ab fielen / , vnnd	ENHG	containment	
16	2720. dannen zuo eynem hauingen / , Buttugaris genant / (.) da meyneten wir das schiff mit Prasilien holtz zu laden / , auch den Wilden mehr victalien ab zu beuten .	ENHG	containment	
17	2726. bei eyne stat , Porta sancta Maria genant / (.) Da wolten sie das schiff mit wein laden / (.) von dannen reysete ich nach eyner stat , Ciuilien genant /	ENHG	containment	
18	2008. , Hettan genant / , morgens frue zuo raysen / , da dan ein Gart mit wasserbechen lustig vnd reich war . (.) Dahin zohe nun der Koenig vmbs lusts willen	ENHG	containment	attribute
19	571. pegyrt vnd wurt entczunt in der lyeb der hymelyschen vnd ewigen dingen vnd wurt erfullt mit vnaussprochlycher suesigkayt des heylligen geysts vnd wurt in in ein prunen des lebentigen wasers entspringen	ENHG	containment	attribute
20	483. (.) sing mit schallen , dye perg werden tropfen dye suesigkayt vnd dye puchel fliesen **mit** mylych vnd honig (.) allan got sagen wyr danck ewigklych amen (.) der xxiij tag	ENHG	attribute	containment
21	Silvelie stand hinter einem Tisch und füllte eine Bonbonniere **mit** Schokoladenpralinés, vorsichtig mit ihren rosigen Fingerspitzen die Bonbons aneinanderreihend.	NHG	containment	

CONTAINMENT	Example	Language	Frame 1	Frame 2
22	Belfontaine folgte ihm widerstrebend in sein 'Laboratorium', wie Mösinger stolz einen Holzverschlag hinter dem Laden nannte, welcher gleichzeitig Lagerraum war und bis an die Decke hinauf **mit** Chemikalien, Tiegeln und Mörsern, mit Werkzeugen, Waagen, Büchern, Gewichten und Reagenzgläsern vollgestopft war.	NHG	containment	
23	Die Abteilung für schöne Künste der amerikanischen Militärregierung in Groß-Hessen teilt mit, daß 8 Wagenladungen **mit** 230000 Büchern und Urkunden, die während des Krieges nach Deutschland gebracht wurden, auf dem Rückweg in die Sowjetunion seien.	NHG	containment	
24	Da war nichts als ein Lager aus Mänteln und Lumpen, da war das Feuer, herum standen einige Kochgeschirre und Konservenbüchsen, zwischen Feuer und Lager ein Kasten **mit** einem Fernsprechapparat; auf dem Lager hockte mit untergeschlagenen Beinen und unter einem an Stöcken aufgestellten und ihn wie ein Zelt überragenden Fahrerpelz ein kleiner Kerl mit pockennarbigem Gesicht.	NHG	containment	
25	Wir pflückten von den Schutthaufen Melde, von den Rainen Otterzungen und von den Zäunen wilden Lattich, um das zu kochen und mit ihm den Magen zu füllen.	NHG	containment	
26	Denselben Nachteil haben die städtischen Schwimmbäder, in denen das Wasser nicht fortwährend gewechselt wird und sich mit gesundheitsschädlichen Abfallstoffen der Haut der Badenden anfüllt.	NHG	containment	
27	Er ist keinem seiner Sätze untreu, der Zorn über das Dasein füllt die Sätze des Romans auch syntaktisch mit Zorn.	NHG	containment	
28	Im Kampmann Verlag erscheint 'Das Ehe-Buch' mit Beiträgen berühmter Autoren (u.a. Thomas Mann und Ricarda Huch).	NHG	containment	
29	Wie da gerungen wird; wie da versucht wird, das Gute von außerhalb zu adoptieren und das Eigne zu bewahren - und wie aussichtslos das alles ist, wie uneinheitlich, wie durchsetzt mit Romantik, Phrase, verhülltem Katholizismus (der gefährlicher ist als der offene) - machtlos	NHG	containment	attribute

CONTAINMENT	Example	Language	Frame 1	Frame 2
	verbluten diese kleinen Gruppen unter den Mächtigen der Stadt und der Provinz.			
30	Mehrere mit Geschützen und Infanterie beladene Fahren wurden durch Artillerie vernichtet, zahlreiche Gefangene und Beute eingebracht.	NHG	containment	
31	Ebenso schwärmerisch offenbart Clemens Kleinschmidt sein Wissen Beton und Panzer brechende Explosionskörper damals und heute betreffend, von der 13-kg-Flammstoffbombe **mit** Benzinfüllung, über den steuerflugtauglichen Napalmcontainer oder das mit Treibladung gefüllte, nach dem Prinzip der Hohlladungsgranate konstruierte Rohr mit aufgesteckter Munition - die gute, alte Panzerfaust - bis zu der wie ein rückstoßfreies Geschütz funktionierenden Bazooka.	NHG	containment	attribute
32	Ein langer Präfekt in schwarzem Rock; große, gewölbte Korridore, auf deren Steinfliesen die Schritte hallten; eine breite Treppe; der weite Studiersaal der Lateinschüler, **mit** den dreizehn Pulten, jedes zu vier Plätzen; hinter dem Studiersaal der Kastenflur mit den zweiundfünfzig Schränken, unter denen ich die Nummer Elf bekam.	NHG	containment	attribute
33	Aber ein Zimmer mit so viel Gegenständen wie das unsrige hält sich nicht selbst in Ordnung.' Daraufhin hat Delamarche nachgedacht, was sich da tun ließe, denn eine beliebige Person kann man natürlich in einen solchen Haushalt nicht aufnehmen, auch zur Probe nicht, denn man paßt uns ja von allen Seiten auf.	NHG	containment	attribute
34	Etwas langsamer, sonst aber ähnlich wie der Salpeter, wirkt das schwefelsaure Ammoniak, mit etwa 20,5% Stickstoff, das im Boden durch salpeterbildende Bakterien weiter in Salpeter umgewandelt wird, wenn es nicht vorher als Ammoniak von den Pflanzen schon aufgenommen wurde.	NHG	containment	attribute

CONTAINMENT	Example	Language	Frame 1	Frame 2
35	Der Bau von Kleinwohnungen mit 1-3 Wohnräumen nimmt zu.	NHG	containment	attribute
36	In der Nähe von Lyon ist gestern ein mit drei jungen englischen Studenten besetztes Automobil beim Ueberholen eines anderen Kraftwagens ins Gleiten gekommen und gegen einen Baum geschleudert worden.	NHG	containment	attribute
37	Startete die Videokassette mit der Love Parade	NHG	containment	circumstance
38	Wird ihnen ein neues Amt übertragen, so erhalten sie die Amtsbezeichnung des neuen Amtes; gehört dieses Amt nicht einer Besoldungsgruppe **mit** mindestens demselben Endgrundgehalt (§ 26 Abs. 1 Satz 2) an wie das bisherige Amt, so dürfen sie neben der neuen Amtsbezeichnung die des früheren Amtes mit dem Zusatz " außer Dienst " (" a. D.	NHG	attribute	containment

DIRECTIONALITY	Example	Language	Frame 1	Frame2
1	her thar . Thaz skef in mittemo seuue uuas givvuorphozit mit then undon : uuas in uuidaruuart uuint . In thero	OHG	directionality	
2	2708. vns verhinderte . (.) Die nacht vor aller heyligen tag / fuhren wir von Barbaria mit eynem grossen sturmwind nach Prasilien zuo . (.) Als wir nun 400 . meil von	ENHG	directionality	
3	2712. solche liechter muesten eyn wunderwerck Gottes sein . (.) Wir siegelten hin durch das meer mit guotem winde / (.) den xxviij . tag Januarij / kriegen wir eynen huck landes	ENHG	directionality	

INSTRUMENT	Example	Language	Frame 1	Frame 2
1	dera zahire , dare nah chumet er unte pisizzet siu mit sinemo liêhte . Do er siu do hina sante ,	OHG	instrument	
2	Crist unte Iudas spíliten mit spîeza . do wart der heiligo Xrist wnd in sine	OHG	instrument	
3	salz endi saiffun endi rhoz astorscala . al zesamene gemiscę . mid aldu uuaiffu aer þu hręne . rip anan daz simplę unz dęz iz blode	OHG	instrument	
4	porge frido enti meintati ungahiure scozila . skurgi de suuarzun mit dinu skiltu . dei fornimu . enti gatom . in	OHG	instrument	
5	rationale , corpus est mortale : tiu sint zimber , mit dien gat er umbe . In hunc modum . Quid	OHG	instrument	
6	gezeigon . dar ist al , daz er ist , mit temo gat er umbe . Ad hunc modum . Quid	OHG	instrument	
7	er quat , Gorio wâri ein goukelâri , hiez er Gorion vâhan , hiez inan uzziohan , hiez inan slahan harto mit wuntarwasso swerto . Daz weiz ih , daz ist ala	OHG	instrument	
8	nu bi huldi gibu · hadubraht gimalta hiltibrantes sunu · mit geru scal man geba infahan ort widar orte · du	OHG	instrument	
9	, ih biuual mih fora ubilero lusti ente daz ih mit minan ougun gisah daz mi urloubit ni uuas . ih	OHG	instrument	
10	sprah ih mit diu de ih scolti guotiu sprehe , ent **mit** minan hantun uuorhta daz ih ni scolta uuirchen . ih	OHG	instrument	
11	er de iagere gestincit , so uertiligot er daz spor mit sinemo zagele ze diu , daz sie n ni ne	OHG	instrument	
12	unde alle die zoge , die ímo uuiderstant an sînemo loufte, dîe segot ez abo mit déro uuassî sínero horne . Den ez áber dûrstet ,	OHG	instrument	
13	inan mohtin ruogen . Ther heilant thô sih nidar neigenti mit sinemo fingare screib in erdu . Mittiu sie thuruh uuonetun	OHG	instrument	
14	minen fuozon , thisiu abur mit ira zaharin lacta inti **mit** ira fahsu suarb . Cus mir ni gabi : thisiu	OHG	instrument	
15	mit lesti thia sie fortragan ni mugun , inti ir **mit** einemo fingare îuuueremo ni ruoret thia burdin . Uue iu	OHG	instrument	

INSTRUMENT	Example	Language	Frame 1	Frame 2
16	thaz her sinen engilun gibiote fon thir , thaz sie mit iro hantun thih nemen , zi thiu thaz thu ni	OHG	instrument	
17	in labal inti bigonda thuuahan fuozzi sinero iungirono inti suuerban mit themo sabane themo her uuas bigurtit . Quam her tho	OHG	instrument	
18	Tho spuuun sie sin annuzi , thiede inan habetun scimfitun inan inti thactun iro annuzi inti **mit** fustin sluogun inan . Andere mit flahheru henti in sin	OHG	instrument	
19	thactun iro annuzi inti mit fustin sluogun inan . Andere **mit** flahheru henti in sin annuzzi sluogun quedenti : uuizzago uns	OHG	instrument	
20	silabarlingon in thaz tempal thana fuor , gangenti erhieng sih mit stricu . Thie heroston thero heithaftono intfanganen silabarlingon quadun :	OHG	instrument	
21	, ni brachun sinu gibeinu . Oh ein thero kemphono mit speru sina sita giofanota , inti sliumo uz gieng bluot	OHG	instrument	
22	. Intfiengun sie tho thes heilantes lichamon inti buntun ínan **mit** sabonon mit biminzsalbun , soso uuísa ist Iudon zi bigrabanne	OHG	instrument	
23	sentet íuuara merigrozza furi súin , min odouuan furtreten sie mit iro fuozun , inti giuuentite zibrehhent iuuih .	OHG	instrument	
24	in huse ni giuuoneta , ouh in grebirun , Noh mit ketinun giu mohta ín einig mán gibintan , uuanta her	OHG	instrument	
25	nahtes inti tages in bergun uuas ruofenti inti hío sih mit steinun . Gisehenti tho then heilant ferrana ingegin liof inti	OHG	instrument	
26	hús thanan ih úz gieng , inti quementi findit zuomigaz mit besemen gifurbit inti gigaruuit . Thanne ferit inti nimit sibun	OHG	instrument	
27	brachun hungerente sine iungiron thiu éhir inti azun skelente íz mit iro hanton . Sume thero Phariseorum quadun ín : ziu	OHG	instrument	
28	órun suarlihho gihortun inti iro ougun bisluzun , mín sie **mit** ougon sihuuanne gisehen inti mit órun gihorent inti mit herzen	OHG	instrument	
29	ougun bisluzun , mín sie mit ougon sihuuanne gisehen inti **mit** órun gihorent inti mit herzen furstantent inti sín giuverbit inti	OHG	instrument	

INSTRUMENT	Example	Language	Frame 1	Frame 2
30	sie mit ougon sihuuanne gisehen inti mit órun gihorent inti **mit** herzen furstantent inti sín giuverbit inti ih heilu sie .	OHG	instrument	
31	Maria habenti salbfaz salbun fon narthu gitana diura , inti gibrohanemo goz ubar sin houbit linentes , inti salbota sine fuozi inti suarb mit ira locon , inti thaz hus uuas gifullit fon themo	OHG	instrument	material
32	scolta uuirchen . ih fergoumolosata daz ih sculdic uuas . mit minan fuozun gien ih dar in urloubit ni uuas .	OHG	instrument	means
33	· nu scal mih suasat chind · suertu hauwan breton mit sinu billiu eddo ih imo ti banin werdan · doh	OHG	instrument	
34	Marthun sineru suester . Maria uúas thiu da salbota trohtin **mit** salbun inti suuarb sine fuozi mit ira fahsu ; thera	OHG	instrument	
35	: uuazzar ni gabi thu minen fuozon , thisiu abur **mit** ira zaharin lacta inti mit ira fahsu suarb . Cus	OHG	instrument	
36	...mugan ziuuerfan gotes tempal thaz mit henti giuuorhtaz inti after thrin tagon anderaz nalles **mit** henti gitanaz zimbron . Ther heilant suigeta . Erstuont ther	OHG	instrument	
37	bari , inti gibar ira sun êristboranon inti biuuant inan mit tuochum inti gilegita inan in crippea , bithiu uuanta im	OHG	instrument	
38	giu mohta ín einig mán gibintan , uuanta her ofto **mit** fuozthruhín inti mit ketinun gibuntan zibrah thie ketinun inti thio	OHG	instrument	
39	so her gisah thaz hér gireinit uúas , uuarb uuidar mit michilera stémmu michilosonti got . Inti fiel in sin annuzi	OHG	instrument	manner
40	thiu da salbota trohtin mit salbun inti suuarb sine fuozi **mit** ira fahsu ; thera bruoder Lazarus uuard cumig . Tho	OHG	instrument	material
41	in hellauúizi . Eno nú ia coufit man zuene sparon mit scazzu ? inti ein fon then ni fellit ubar erda	OHG	means	instrument
42	unseriu muot imo kilúteret uuerdent mit dera heiligen bredige unte **mit** demo brunnen dera zahire , dare nah chumet er unte	OHG	means	instrument
43	chom uiench den sichen bi den hanten . uurt in mit rate uz der menige der sunten . rurt im **mit** dem uinger sinen munt . unt siniv oren . gab	MHG	instrument	

INSTRUMENT	Example	Language	Frame 1	Frame 2
	im mit der gebe sines heiligen gaistes . rehte sinne			
44	. begehet gote **mit** der harpfe mit salter zehen saeiten singet im . singet ime gesanch niwez wol singet im mit rufe . want rehte ist wort gotes un elliv werch sin mit triwen . er minnet die genade un daz	MHG	instrument	
45	ne wesse zestoret wrden si nieht gestunget . si uersuhten mih si spoten min mit schalle si girscramoten uber mih **mit** zanden ire herre wanne sihest du ez irstate die sele min uon ubele ire uon lewen aeinige mine . ih	MHG	instrument	
46	lobe dich nieht uber frowen sich mir die da wider sint mir unrehte die da hazent mich danches un winchent mit den ovgen . want si mir idoch fridelichen zu sprachen un in dem zoren der erde sprechente . honchuste si	MHG	instrument	
47	besicent die erde un in gelinget in dem michelem fride ez wartet der suntaere dem rehtem un grischramet uf in mit zanden sin herre abe bespotet in want er siht daz chomen sol tach siner swert ir uz zugen die suontaere	MHG	instrument	
48	un zeuaren hieze als die spinne sele sin iedoch upechlichen truret ieglich mennisk erhore gebet minez herre un dige mine mit oren uernim zaeher mine nieht swige want her chomener ih bin ze dir un ellender sam alle uater minne uerlaze	MHG	instrument	
49	un war umbe betrubest du mich getruwe got want ich noh begihe ime hail antluce mines un got miner Got mit oren unseren wir uernamen uater unser chuondoten uns daz werch daz du worhtest in tagen ire un in tagen alten	MHG	instrument	
50	dem heiligen cruce . E ir iuch nider leget . so sol ain swester umb gen . unt daz slafhus mit tem wihen prunnen uil flizlichen besprengen . So ir nider chomet . unt niht slafen movget . so denchet wider	MHG	instrument	
51	. uber die wndin und sprechet also . De iud longinus der unsern herren ih-m xꝑM staech in die siten mit den sper . daz en eitert nith . noch gewan hitze . noch en swar . noch en bluotet ze	MHG	instrument	

INSTRUMENT	Example	Language	Frame 1	Frame 2
52	kuomin den spitalin . mit den almuosin . die seluen suolin ovch so guotes leuenis sin . dat sie iht **mit** ir boesen bilde . also helies svene taden . die luete uon gotes opfferre . un der siechen almuosen widerzeihen	MHG	instrument	
53	gesprochen dat nie ouge in gesag noch nie ore in gehoirde dat hait Got sinen vrunden bereit dat sach he **bit** ougen inde hoird it bit oren ... Benedicamus patrem et filium cum sancto spiritu Wir loven den vader inde den	MHG	instrument	
54	gesag noch nie ore in gehoirde dat hait Got sinen vrunden bereit dat sach he bit ougen inde hoird it **bit** oren ... Benedicamus patrem et filium cum sancto spiritu Wir loven den vader inde den suon bit deme heiligen geiste	MHG	instrument	
55	do durch einen spiz vnd leg ez zvo dem viuere vnd beslah ez eins mit eyern vnd eins mit smaltze **mit** zwein swamen also lange bizdaz ez singe vnd rot werde vnd gib z hin . Ein guot fuelle .	MHG	instrument	
56	in eyer vnd lebern ruere daz zvosammene daz ez blibe weich so nim abe die pfannen mach in schoene mit einer schinen hald ez wider veber daz fiuer vnd mach ez veist vnd tuo daz muos gantz in die pfannen	MHG	instrument	
57	ein tuoch . vnd ein schaub dr under . vnd mache ein teyc von semelmelwe . vnd wille daz mit eyner wellen / vnd leg des gesoten mandels dor vf / vnd snit daz abe vnd back ez in eyner	MHG	instrument	
58	geben noch vailsen danne mit der burger wage noch der burger gesetzte . vnd daz selbe geloete sol gezaichent sein **mit** der burger zaichen . Man hat auch . Von juden flaische gesetzet maister die bewarn suln daz kain jvde kain	MHG	instrument	
59	der schol haben daz selbe reht daz der gedingt kneht hat Swelch bvrger den andern mit verdahten mvot mit samenvnge mit stecken oder **mit** stain oder mit dehainer slahte wer missehandelt . so sol der da ist hauptman ze pezzervnge geben	MHG	instrument	
60	selbin stunt erschein der heilige engele den hirten vf dem velde die da wa=cheten ober ir vih nach den lantsiten mt grozme liechte . vnd	MHG	instrument	

INSTRUMENT	Example	Language	Frame 1	Frame 2
	sie hatten groze vorchte . Do sprach der engel . en vorchtet vch niht . Jch			
61	suzen ave Vnsern heren den waren Got . daz sie mich volvaren Laze in minem willen Vz deme buche billen Mit miner zvngen einen Danyelem den reinen Den got von der lewen mvnt Machte zeichenlich gesunt Er ist ein ppheta war	MHG	instrument	
62	vnde gyngen myt ym also wyte alse daz lant waz do begonden dy lute dy sychen czu ym czu tragene **myt** den betten swar sy en wosten . vnde swo her gynk uf der straze in den dorfen adir in den	MHG	instrument	togetherness
63	glra patri nigen mit gemeinelicher neigun=gin des liues . Sie suolin ouch mit ulize huotin des . dat ieman . **mit** wispele oder mit stimme . un ovch mit ungehortenetin ... Der meister disses ordenes . ovue die an siner stat	MHG	instrument	means
64	up den dach tuschen primen inde tercien bi eime hair breit deme eineme nie nare dan dem andrin inde mazin mit naturlicheme sinne wie ho it hinne is zuo dem hiemele den wir sien inde wie manch der hiemele sin da	MHG	instrument	means
65	guot dat Maria hadde irkorin Suole wir zuo dieseme guode kuomen so suole wir uover allit dat kuomen dat wir mit unsen sinnen begrifen muogen inde uover alle bieldunge her zuo kuoment alse lutselief luode dat ich niet in weis of	MHG	instrument	means
66	der im dient avf gnade der schol haben daz selbe reht daz der gedingt kneht hat Swelch bvrger den andern mit verdahten mvot **mit** samenvnge mit stecken oder mit stain oder mit dehainer slahte wer missehandelt . so sol der da	MHG	instrument	togetherness
67	. diz heizzent huenre von rinkauwe vnd gib z hin . Ein guot spise . Man sol ein huon braten mit spec gewuelt / vnd snit denne aht sniten arme rittre vnd backe die in smaltze niht zvo truege vnd schele	MHG	instrument	attribute
68	ich din gast Zv eren den beschriben Die da mit strit vertriben Haben . vz pruzen lande Abgote mancher hande **Mit** ritterlichem swerte So	MHG	accessory	instrument

INSTRUMENT	Example	Language	Frame 1	Frame 2
	lange ez do werte Daz der geloube bluet In deme lande gluet Ouch gotliche caritas Die			
69	. do waz iz im leit . vnde vloch vnd vorbrach sich . Alda vormeldete in vnser here got selbe mt eime liechte daz er=schein ober ime als die svnne . Do wart er uunden . vnd wart gewiet zv pabiste	MHG	means	instrument
70	loese abe die hut als gantz vnd suede in gar vnd loese vz die grete nim krut vnd stoz daz mit dem vische . tuo dar zvo ro eyer vnd saffran vnd fuelle die hut des hechdes vnd roeste in ein	MHG	togetherness	instrument
71	440. dem xx spyegelein v sych an , wie das h creucz ist das wapen , mit dem wyr vns allerpast vor vnssern feinden vnd aller anfechtung mugen pewaren (.) sych an	ENHG	instrument	
72	517. das menschlich geschlecht gehabt hat , genumen hat , vnd im dyeselben con.elirt vnd durchstochen **mit** den heylligen sper vnd die mit eysennagel an das creucz geheft , das sy furpas	ENHG	instrument	
73	549. pletlein hat geleichnus alls ein sper (.) darpey wurt herczlych erinert dye allerheyligest lanczen , mit der geofnet ist worden dye allerheyligest seyten vnd das hercz xpin (.) wan , so	ENHG	instrument	
74	550. hystorya von dem wyrdygen haltum czu nurenberg (.) das feslein des herczen xpin wurt durchstochen mit der lanczen vnnd wurdt heraus geschenckt das haylsam truncklein (.) so dye lanczen ein gedunckt	ENHG	instrument	
75	552. das vnſſer pehallter da er jetzung ann dem heyllígen creůcz ſeinen heylligen geiſt het auf geben , das er lyd , das Sein heyllige seyten sollt durchstochen werden mit dem sper , das von dem aus flieseten pluot vnnd wasser im geformiert wurdt ein	ENHG	instrument	
76	553. ist worden czw der glory eines sollycher grosen haltumbs , wan dys heyllig sper , mit dem es geofnet hat dye heyllig seyten xpin , hat es vns auch auf gethan	ENHG	instrument	

INSTRUMENT	Example	Language	Frame 1	Frame 2
77	554. hat es vns auch auf gethan das thurlein des hymelyschen reychs (.) dys sper , mit dem es verwudt hat den toden jesum , hat es auch gesundt gemacht vnsser wunden	ENHG	instrument	
78	556. mit seinem kospern pluet ab gewuscht vnsser schuld vnd so dys sper geneczt ist worden **mit** dem allerheyllygesten wasser der seiten xpin , so hat er hin genumen dye vinsternus vnsser	ENHG	instrument	
79	564. lyeb , alls der herr selber sprycht (:) () mit Der lyeb verwunt (.) () **mit** demselben sper der gotlychen lieb peger auch herczlych , das dein hercz verwundt werd (;)	ENHG	instrument	
80	569. seinem leben hat lassen verwunden , sunder hat auch nach seinem tod sein heylligs hercz mit der lanczen durchgraben lassen (?) allso dye leyplychen wunden seines heylligen herczen erczayt die geistlychen	ENHG	instrument	
81	629. sagen / , er sey / erfrorn / , Aber etlich vermainen / , sey mit ainem rauch erstoeckt . (.) Der Gabriel , als lang diser Demeter gelebt / ,	ENHG	instrument	
82	681. du erloeßt hast / mit deinem khostparlichen bluoet deines ainigen Suns / (.) Besalb den **mit** dem oel der freyden / , beschütz den mit der crafft des hoechsten / ,	ENHG	instrument	
83	691. Metropolit / darnach Ertzbischoue vnd die Bischoffen zu dem Jungen / vnd geben / jme mit jren henden den segen / , So das nach der ordnung also verricht worde /	ENHG	instrument	
84	745. / (.) Jch vnnd mer haben gesehen in der Mosqua , das die betrunckhnen briester mit gaisln auff der gassen geschlagen seind worden / (.) Die haben sich nicht anderst beschwaerdt	ENHG	instrument	
85	748. vom Prior / , da er jme solches waigerte / , droet jm der Pristaw mit der Gaysl / (.) bald wardt der Muenich gehorsam / (.) vil seind , die	ENHG	instrument	
86	807. hoeren . (.) 6 . Die Apostel haben gelehrt / , man soll die Krancken mit dem H . Oehl salben / , Jac . 5 . v . 14 .	ENHG	instrument	
87	819. der Ketzer brauch / , welche schier nichts glauben woellen / , was sie nicht **mit** Augen	ENHG	instrument	

INSTRUMENT	Example	Language	Frame 1	Frame 2
	sehen / oder mit Haenden greiffen . (.) Sonst sagt disem Fuchsen / ,			
88	820. welche schier nichts glauben woellen / , was sie nicht mit Augen sehen / oder **mit** Haenden greiffen . (.) Sonst sagt disem Fuchsen / , es werden die Jesuiter jhme	ENHG	instrument	
89	834. Ordinandis die Haend auff gelegt / in der ApostelGeschichten ? , Da sie die Krancken mit dem Oehl gesalbet / in der Epistel Jacobi ? (?) Vnd wo steht es geschrieben	ENHG	instrument	
90	835. die im Newen Gesatz die schon empfangene Gaben vnd innerliche Gnaden / , die wir mit Augen nicht sehen . (.) Ferner , wann die Ceremonien deß Newen Testaments keinen Grund	ENHG	instrument	
91	1227. ein ander schar dar (.) so trang dotend die eignoß{1}et , men hette ein karren **mit** boegenpfilen funden , was die oberlender ersluogen mit hallebarte zuo grunde (.) die von basel	ENHG	instrument	
92	1228. die eignoß{1}et , men hette ein karren mit boegenpfilen funden , was die oberlender ersluogen **mit** hallebarte zuo grunde (.) die von basel zugend mit der baner zem keppelen zuo eschmertor	ENHG	instrument	
93	1242. olbrecht vō o̊ſterich hat ein leger uffgeſlagen gegē Rinfelden mit eime groß{1}et , reisigen gezuge vnd fuoßfolck , mit vil wegene{6} , sluog do sin feld **mit** vil gezelten uff gegen den von basel , sbto{1}0 an{1}0 nat{3} Marie xlv (.) schoß	ENHG	instrument	
94	1984. da gehn wasser zu schoepffen / , sich mit stricken vnnd lederin Aymern / oben **mit** rayflein ein gefangen / , wie die in disen Landen gebreüchig / , versehen /	ENHG	instrument	
95	2300. nach dem streich ward Oliuier als schwach / , das die recht handt / , mit deren er das schwerdt gefast hette / , jme entschlieff vnd geschwalle von den schlegen	ENHG	instrument	
96	2323. groesten mans suone / , der vnder jnen gesein mocht / (.) den schlug er mit dem schwerd als crefftigklich / , das er jn biß auff die brust zerspilt /	ENHG	instrument	

INSTRUMENT	Example	Language	Frame 1	Frame 2
97	2709. das meer / , kamen vil fische vmb das schiff / , der fiengen wir mit angelhacken . (.) Derselbigen waren etliche , welche die schiffleut nenneten Albakore / , waren	ENHG	instrument	
98	574. erhyczigt vnd erwermt werdest von dyssem edlen rosmarinwein , das dein hercz gancz verwunt werd mit der lyeb der verwunten herczen deines allerlyebsten lyebhabers (.)	ENHG	instrument	agentive
99	450. vnd ewangelisten vnd junger xpren (.) stock auch dissen edlen mayen , wan jr etlych **mit** leyblichen augen vnnd sy all mit geystlichen augen dissen haylsamen mayen gegen wyrd geschaut vnd	ENHG	instrument	manner
100	496. er in disem leczten wort lieblich vnd freuntlich , alle , dye er erlost het mit seinem kospern plut , dye sunst an sein entpfalchung ewigklych heten muesen von got verstosen	ENHG	instrument	means
101	616. muegen / , dann so bewegt da BLVD seinen Herren / , Er soll sich mit seinem Brueeder / , der vil sterckher dan er war / , befriden / vnd	ENHG	instrument	togetherness
102	634. erobert hette / (.) Mit den gefangnen ist der Moscouiter grausamblich vmb gangen / , **mit** grossen Khetten beschwerlichen gehalten / , mit dem oebersten Haubtman Hertzog Constantin gehandlt / ,	ENHG	instrument	
103	683. Scepter / , setz den in den stueell der gerechtigkhait . , Vmb fach den mit allen waffen / der gerechtigkhait / , besterkh jme seine arm / Vnd vnder wirff	ENHG	instrument	
104	738. stab / vnnd nimbt den sambt dem Ambt zuo sich / , Laßt den Bartholomeum mit Khetten verschmiden / vnnd schigkht den zu dem weissen See / (.) man sagt ,	ENHG	instrument	
105	739. / , Wan er zu/o Khirchen sein Ambt verrichten solt / , hat er sich mit schwebl berauchen lassen / , damit er Jme ain plaiche gestallt machte / , dartzue	ENHG	instrument	
106	2691. das man leute finde / , die am gegenort des erdtrichs / vnden vnder vns mit jren fuessen gen vns gehen / vnd also den kopff vnd leib vnder sich hangen	ENHG	instrument	

INSTRUMENT	Example	Language	Frame 1	Frame 2
107	815. Egypten / , Jndia / vnd so vielen maechtigen Jnsulen / , darinn der Mahomet mit seim Alcoran regirt ? (?) Nun Europa wird gemeiniglich in zehen Provincias oder Koenigreich ab	ENHG	instrument	togetherness
108	680. , ainen Khuenig zue erhoehen deinnen heilligen voelgkhern / , welche du erloeßt hast / **mit** deinem khostparlichen bluoet deines ainigen Suns / (.) Besalb den mit dem oel der freyden	ENHG	instrument	means
109	565. lerer wananentura sprycht (:) () o allersuesester herr jesus , durchstych die inigkayt meines herczen mit dem allerspiczgesten sper deiner gotlychen lyeb (.) () o wollt got , das jch wer	ENHG	instrument	
110	447. den ersten artyckel des ersten gegenwurfs (.) trag furpas disen edlen mayen vnd stock in mit duemuettigkayt fur dye thur dein allerlyebsten gespanssen jesu xpren (.) pyt in durch deswyllen ,	ENHG	instrument	
111	520. dem pewysen hat , das er das kamyn seines mynsam herczen , das gehyczt was mit dem feur der gotlychen lyeb , dye der heyllig geist selbst wossenlych ist , lief	ENHG	instrument	
112	3820. , vns selbst weydenn (.) Amen . (.) Luther ruemet sich / , er fechte mit schryfften (.) Er ist aber das waffen vnd pfeyl / vorgyfften (.) Demnoch / ,	ENHG	instrument	
113	682. ainigen Suns / (.) Besalb den mit dem oel der freyden / , beschütz den **mit** der crafft des hoechsten / , setz auff sein Haubt die Cron von Edlem gestain	ENHG	instrument	means
114	2267. , sein antlitz **mit** seinem mantel bedeckent , in die Cappel / , vmb fasset mit seinen armen das Crucifix vnd sprach also : (:) () Mein Herr vnd Got /	ENHG	material	instrument
115	1999. darbey grosse Gaerten , reich von schoenen Gartengewaechsen vnd guoten früchten , die aussen herumb mit rinckmauren / , weil taeglich der Araber vberlauff gar groß / , zimlich verwaret .	ENHG	means	instrument
116	817. , weiln sie allein auff das Judenthumb gehn . (.) Eben so wenig gewinnt er mit dem kleinen Haeuffle / , davon Christus redet , Luc . 12 . (.) Dann	ENHG	togetherness	instrument

INSTRUMENT	Example	Language	Frame 1	Frame 2
117	Mit diesen zusammen operierten sie im Gefecht; zu ihnen zogen die Reiter sich zurück; sie eilten herbei, wo es hart ging; war einer schwerverwundet vom Pferd gefallen, so traten sie um ihn herum.	NHG	instrument	
118	Er führte durch einen äußerst zerklüfteten Gletscherbruch, der durch mehrere Absprengungen von Eisrippen und durch ausgiebige Grabarbeiten mit der Eisaxt für die Pferde begehbar gemacht werden mußte.	NHG	instrument	
119	In ihrer Wohnung in der Jenaer Straße 21 zu Wilmersdorf hat sich gestern abend die Büfettmamsell Anna Kloschinski mit Salzsäure vergiftet .	NHG	instrument	
120	Mach hat (a. a. O. S. 324), wenn ich die merkwürdige Stelle ganz recht verstehe, den Substanzbegriff als abhängig von dem historisch, also zufällig gewählten Maße dargetan; weil wir das Wasser, dessen Höhenenergie Arbeit leistet, nebenbei auch mit der Wage messen, darum ist es uns ein Stoff; Sauerstoff war so lange kein Stoff, als er nicht gewogen werden konnte.	NHG	instrument	
121	Tante Magy kann der Amerikanischen nicht zumuten, in der Futterküche mitzutun, weil der Onkel schmatzt und weil der Knecht sich während des Essens bald **mit** der linken, bald mit der rechten Daumenmaus die Unternase trocknet.	NHG	instrument	
122	Es öffneten sich die großen Parktore; von selbst öffneten sie sich, als der Kutscher nur ungeduldig davor mit der Zunge schnalzte, und über den steinigen Sand knirschte die Karosse.	NHG	instrument	
123	Die Erde unter den Füßen fühlen; ein Steinchen mit der Fußspitze beiseite schleudern; ein Blatt im Gehen abreißen; stehenbleiben und sehen, was denn da im Bach herumkreiselt; aus dem Bach trinken; an die Häuser herangehen und sie **mit** den Händen befassen, kennst du diesen Stein? nicht so sehr die Weite kontrollieren als genau die kleine Umwelt -: das ist das andere.	NHG	instrument	

INSTRUMENT	Example	Language	Frame 1	Frame 2
124	Schließlich wäre zu bemerken, daß auch sonstige mehrwertige Phenole mit Aldehyden umgesetzt werden können (eventuell in Gegenwart von Lösungsmitteln bzw. unter Druck), wobei u. a. Azetaldehyd, Benzaldehyd, Krotonaldehyd und Furfurol anwendbar sind.	NHG	instrument	
125	Manche Sätze sind mit Rotstift unterstrichen.	NHG	instrument	
126	Entfernen Sie also den Staub **mit** einem weichen Lappen, verkrusteten Schmutz aber unter allen Umständen mit viel fließendem Wasser.	NHG	instrument	
127	Epidemien von Tetanus, welche manchmal in der Praxis von gewissen Hebammen vorkommen, sind fast immer auf erstere Ursache zurückzuführen, weil die Betreffende die üble Gewohnheit hat, die Temperatur des Badewassers **mit** dem Ellenbogen statt mit dem Thermometer zu messen und dadurch ihr Gefühl so abstumpft, daß sie den rechten Wärmegrad nicht mehr zu erkennen vermag und die ihrer Obhut anvertrauten Kinder förmlich verbrüht.	NHG	instrument	
128	Nun wurden die verschiedenen Isomeren des Trimethyl-o-phenylendiamins (in denen immer eine Methylgruppe am Stickstoff stand) der Kondensation **mit** Alloxan unterworfen und das Kondensationsprodukt aus 2-Methylamino-4,5-dimethylanilin erwies sich als identisch mit dem Lumilaktoflavin, dessen Konstitution damit aufgeklärt war.	NHG	instrument	
129	Naßgewordener Z.: weißes Tuch über Wasserdampf halten, **mit** ihm nach dem Strich drücken, wischen, mit Samt glätten.	NHG	instrument	
130	Soweit die Produkte bereits vorgehärtet sind, lassen sie sich durch Verquellen **mit** geeigneten Solventien in eine pastose Beschaffenheit überführen, die u. a. eine Vermischung mit Festkörpern erleichtert.	NHG	instrument	
131	Es war sinnlos, in den Kalk mit dem kurzen Spaten eindringen zu wollen.	NHG	instrument	
132	Schlägt Franz auf den Tisch, zeigt **mit** dem Finger auf den Anarchisten, stößt mit seinem Kopf gegen ihn vor:	NHG	instrument	

INSTRUMENT	Example	Language	Frame 1	Frame 2
133	Ich teilte das Fleisch mit dem Taschenmesser, und wir aßen es zu dritt.	NHG	instrument	
134	So überkleben Angestellte der Stadtverwaltung während der Arbeitszeit - unter Verwendung offizieller Autos - regelmäßig alle nichtkommunistischen Wahlplakate mit KP- Affichen : Marchais allüberall - Big Brother sieht dich an.	NHG	instrument	material
135	Jettchen meinte, daß sie sich immer sehr mit Brennglas belustigt hätte, besonders das Berliner Blumenorakel hätte ihr gefallen.	NHG	instrument	
136	Wie Johann mit ausgestreckten Armen das Rad halte, das gefalle ihr.	NHG	instrument	attribute
137	So gleicht in dieser Weltansicht die Sprache der Sibylle, die, nach Heraklits Wort, **mit** rasendem Mund Ungeschminktes und Ungesalbtes redet, die aber nichtsdestoweniger mit ihrer Stimme durch die Jahrtausende reicht:	NHG	instrument	manner
138	Dann zog sie mit ruhiger Hand die schnurgerade Schnittlinie bis zum Kiemenansatz.	NHG	instrument	manner
139	Während dieser Zeit bekommt der Kranke Medikamente, mit denen die Entzugserscheinungen gedämpft und die körperlichen Alkoholfolgeschäden (Frage 15) behandelt werden können.	NHG	instrument	means
140	Nun konnte er unter den vielen, die ihn verflucht, den einen suchen, der am Leben geblieben war, - damit er einmal mit diesem Leben, das er geschont hatte, seinem eigenen Leben helfen könnte, schien es, ja.	NHG	instrument	
141	Die Erinnerung hernehmen wie ein Messer und es gegen sie selbst richten, die Erinnerung abstechen mit der Erinnerung.	NHG	instrument	
142	Ihre Delegierung nach Düsseldorf, die Erteilung des Visums für die Westreise hatte man von oberster Stelle als Vorwand benutzt, um den Offizier und Genossen Willi Meerbusch zu zwingen, Auskunft über die Herkunft von einhunderttausend DM zu geben, mit denen er seine Koproduktion der Kölner Laoze-Film-Gruppe finanziert hatte.	NHG	means	instrument

MANNER	Example	Language	Frame 1	Frame 2
1	. . . . tranh furipurt, das einer eocouuelicher ubar mez imu kirihche edesuuaz eikenes uuillin mit mendi . . . . prinke cote . . .	OHG	manner	
2	, fona sprahchu , fona scerne . . . . mit deru atumlihchun kiridu mendii dera uuihun ostrun pite . Daz	OHG	manner	
3	" der iuih hoorit , mih hoorit . " Indi mit cuatu muatu fona discoom keban kerisit , danta clatamuatan kebon	OHG	manner	
4	. pidiu ibu huuelihhiu ze suahhanne sint fona heririn , mit dera furistun eruuirdii , min si keduht meer sprehhan denne	OHG	manner	
5	ensticheit unte andere tugendi desin keliche . Nu sehen , mit uuelichemo flîzza uuir den gotis uuinkarten ûoben . Adam uuart	OHG	manner	
6	in tac tati so in naht , so ih iz mit uuillen tati so ana uuillun . . . so uuaz	OHG	manner	
7	iz sp r a ngot imo ' n pruston in euuon mit luston . " Herro , ih thicho ze dir ,	OHG	manner	
8	lusto ; thaz ih ci chirichun ni quam so ih **mit** rehtu scolta , mina fastun ni bihielt so ih mit	OHG	manner	
9	mit rehtu scolta , mina fastun ni bihielt so ih **mit** rehtu scolta , min alamuosan ni gab so ih mit	OHG	manner	
10	mit rehtu scolta , min alamuosan ni gab so ih **mit** rehtu scolta , zuuene ni gisuonta * , sunta ni	OHG	manner	
11	zuuene ni gisuonta * , sunta ni furliez themo ih mit rehtu scolta ; heilaga , sunnuntaga enti heilaga messa enti	OHG	manner	
12	enti heilaga messa enti heilagon uuizzod ni erita so ih mit rehtu scolta ; ana urloub gap , ana urloub intphieng	OHG	manner	
13	rîchisôt diu minna mit aller miltfrowida und aller tugidone zála **mit** stâten urasmunde . da uerselet diu warheit daz alte gedinge	OHG	manner	
14	in here slahit . LXVII . so hwer so anđran mit losii biliugit . LXVIII đer andres hros bifillit . LXVIIII	OHG	manner	
15	nehein heilic dinc noh christenlih noh gotelih tinc ne han ih so geeret , so ih mit rehta scolta . Ih pin sundic in allen offenen sundon	OHG	manner	

MANNER	Example	Language	Frame 1	Frame 2
16	richi inti minan namon inti thuruh euangelium , zehenzucfalt intfahit , nu in therra ziti hus inti bruoder inti suuister inti muoter inti kind inti accara mit áhtnessin , inti in zuouuarti euuin lib bisizzent . Manege	OHG	manner	
17	thir : gib thesomo stat , inti thanne biginnis tu mit scamu thia iungistun stat bihaben . Oh thanne thu giladot	OHG	manner	
18	zi sinemo coufe . Thie andere gifiengun sine scalca inti **mit** harmu giuueigite arsluogon . Thie cuning thô , mit thiu	OHG	manner	
19	sinero uuorto , inti fuorun uz slíumo fon themo grabe **mit** forohtu inti **mit** michilemo giúehen loufente sagen sinen iungoron .	OHG	manner	
20	gotes . Inti sie tho betonti uuidar giengun in Hierusalem mit michilemo giúehen . Inti uúarun simbolon in themo temple lobonte	OHG	manner	
21	Arstantenti Maria in then tagon gieng in gibirgu mit ilungu in Iudeno burg , in gieng thô in hûs	OHG	manner	
22	Sie tho úz gangante fuorun in thiu suin , inti mit mihhilu ungirehhu thaz cutti uuas biskrenkit in then seo ,	OHG	manner	
23	thie mih santa . Vvurbun thó thie zuene inti sibunzug mit giuehen sus quedente : truhtin , ioh diuuala sínt uns	OHG	manner	
24	ist , thaz ist ther thie uuort gihorit inti sliumo mit giuehen inphahit íz ; ni habet in imo selbemo vvurzalun	OHG	manner	
25	Iohannes thes toufares . Só siu tho ín gieng sár mit ilungu zi themo cuninge , bát inan quedenti : ih	OHG	manner	
26	tugindan ân aller missetate pflega . Da rîchisôt diu minna **mit** aller miltfrowida und aller tugidone zála mit stâten urasmunde .	OHG	manner	togetherness
27	, danta clatamuatan kebon minnoot . . . . Keuuisso mit ubilo muatu ibu hoorit disco indi nalles (37)	OHG	manner	
28	. . slehto . . . . ano hlahtar theomuatliho mit fruati . . . . foiu uuort enti redohaftiu sprehhe	OHG	manner	
29	ana uuideruebtunga , so pilde Abel . Vbe du kehîter mit reinemo muote uore gote ken uuellest , so pilde Enoch	OHG	manner	

MANNER	Example	Language	Frame 1	Frame 2
30	antlingita her in inti quad : ni cumit gotes richi mit bihaltnesse , noh ni quedent : senu hier oda thar	OHG	manner	
31	Ibu huuaz ist kepotan, nalles stozzonto , nalles uualo , nalles trago edo **mit** murmulode edo mit antuurtu des ni uuellentin ist kitan ,	OHG	manner	concurrence
32	Inti tatun es thinc , thaz sie then heilant fiengin mit feihane inti ersluogin . Quadun tho : nalles in themo	OHG	manner	means
33	so siner upiler uuillo ist , uzzan so uilu so uuir mit dineru ensti upærqhueman megin .	OHG	cause	manner
34	so her gisah thaz hér gireinit uúas , uuarb uuidar mit michilera stémmu michilosonti got . Inti fiel in sin annuzi	OHG	instrument	manner
35	eini manne . tô gebôt er iu ze demo lebinne mit minnon hie ze wesinne , taz ir wârint als ein	OHG	togetherness	manner
36	als vns der vvissage dauid leret . seruite ...o in timore . et cer . eR sprichet . dienet got mit forhten . salomon ...het ovch inꝑbolis . Initiun sapien timor deni . got fvorhten ane ...ank . ist aller	MHG	manner	
37	vvort uil lieben sprichet uns zu div helige scrift uon den herren der hute began . Si quit Wir sulen mit allem ulize tulten und eren hutigen tak eines viscares unde eines achtagers wan uon ir lere ist div vverlt erluhtet.	MHG	manner	
38	not . uon unsere frowen sant Marien . S werchtages mit diner uenie . an dem uiertage ane uenie . **mit** uil lutere andaht . Ander stunt . Dri stunt . Sieben sten . Daz uers siebun sten . Dei zwai	MHG	manner	
39	schiffes . datt ein kogke geheizin is da si die siechin mit grozer andaht . underbrathin . unde der **mit** ulize plagin . Dit cleine begin erbarmede den her=zogin uan suuabin . unde ander die hohen her=rin . der namin	MHG	manner	
40	sei suele intpha=in . mit dem seningin in den schierme der ec=clesien . mit suonderlicheme gunste . un ouch bestetigin mit antlazin . un **mit** priuileigin . Suuat in geistlicher gauin uan guoten lue=din gegeuin wirt . Do huof sich ritterschaft	MHG	manner	

MANNER	Example	Language	Frame 1	Frame 2
41	so sal man sin nach des spitaleres bescheidenheit . der ouch di notdurft sines siechtagin merken sol . plegen wol mit vli=ze . so bescheidenliche . dat man in deme ovuerstin hus . dat hovvet is des ordinis . erzete haue	MHG	manner	
42	enphahe . Dat ouch deis orden mer luete nuezze muo=gen sin . so uerlihen wir . dat man werltli=che luete mit irme ewen . oue ledech wesen=de . zuo der heimeliche disses ordenes enpha=he . unde dat der leif . unde	MHG	manner	
43	der traychheyt . un der heiligen beheltenisse . uersumunge uan den traygen enslahe genendecliche . unde alle ungehorsame zuhtege . mit dem ulize der gerehtecheit . der staif sal sin ueterliche ulize . unde mitelidunge . da mide hei die bedruofden	MHG	manner	
44	eine stait . da wir nith huses in hain . die herbergen mit einander . ouf it sin mach **mit** fuogen . Inkein bruoder sal enpfahen die brieue ze uuorenne . die uan waren sachen arch=wenich sint . Inkein bruoder	MHG	manner	
45	mer danne eine march siluers . oue der wert . unde sal doch dat selue lihen miden . so hei **mit** fuogen mach . it en si danne . mit urlouve . des meisters . oue des lantcomndures . Inchein	MHG	manner	
46	ime nith in gelde . Inchein bruoder neme inchein conmendissen ze behaltene . danne mit scrifthe . ovf it mach **mit** fuogen sin . Inchein bruoder sal samenen . oue heissen hueten uremede uihe . oue bestien mit unsen . ane	MHG	manner	
47	Dat is alse si intfeit ein lieth erkennisse der Gotheit inde dat si gevuolet dat Godes wille in ire levit bit weelden Ouch sprach he dit wort alse du dich wolt virgain bit dinen gedenken so salt u din herze setzen	MHG	manner	
48	bedruofenisse van deme iamere dinis herzen so kuomit ein bitter wazzer uzer dinen ougen inde vluozit up unsen heren inde **mit** bittercheide kuomit id van dime herzen inde uover kurthe wile kuomit id bit suozeme troiste inde bit vroudin inde bit	MHG	manner	

MANNER	Example	Language	Frame 1	Frame 2
49	ougen inde vluozit up unsen heren inde mit bittercheide kuomit id van dime herzen inde uover kurthe wile kuomit id **bit** suozeme troiste inde bit vroudin inde bit vrieden gevlozin zuo dime herzen war umbe is dat dine geringe guzis du	MHG	manner	
50	unsen heren inde mit bittercheide kuomit id van dime herzen inde uover kurthe wile kuomit id bit suozeme troiste inde **bit** vroudin inde bit vrieden gevlozin zuo dime herzen war umbe is dat dine geringe guzis du up die suoze salve	MHG	manner	
51	mit bittercheide kuomit id van dime herzen inde uover kurthe wile kuomit id bit suozeme troiste inde **bit** vroudin inde bit vrieden gevlozin zuo dime herzen war umbe is dat dine geringe guzis du up die suoze salve dat is Jhesus	MHG	manner	
52	war umbe is dat dine geringe guzis du up die suoze salve dat is Jhesus Christus dar umbe kuomit id **mit** suozicheide zuo deme herzin want de allersuoziste de heet dit gemengit mit siner suozer salven also heizet he selve	MHG	manner	
53	des wir wenich wizzen willen Zuo einer zit sprach he Die tafele is gesath die wirtschaf is bereit ilen wir mit grozer begerringen zuo dieser grozer wirschaf da al is bereit inde niet in gebrichit die boden sint gesant manichveltliche inde	MHG	manner	
54	he ime sinre Gotliche ere inde vorte da liet anevanc allir sunden alse du eine sache irkusis inde dar up mit allir diner begerden vervluzis wieder Got sunder vorte da miede rovis du Got siner eren des he siner muodir niet	MHG	manner	
55	auch nieman der verbotten wer tregt dehaine vaile sache ze kavfene geben . Jm sol auch kain wirt seinen wein **mit** wizzen geben tvot er daz dar veber der gibt sehtzic pfenninge . Tregt in der avftrager dar mit gewissen der	MHG	manner	
56	mit dehainer slahte wer missehandelt . so sol der da ist hauptman ze pezzervnge geben cehen pfunt . vnd swer **mit** gewissen da mit get oder dar zvo kvmt mit gewissen / daz er ainen ze geverde bei / stet .	MHG	manner	

MANNER	Example	Language	Frame 1	Frame 2
57	da ist hauptman ze pezzervnge geben cehen pfunt . vnd swer mit gewissen da mit get oder dar zvo kvmt **mit** gewissen / daz er ainen ze geverde bei / stet . vnd disem der ez tvot ze hilfe swer der	MHG	manner	
58	der havptman oder der im hilfet . oder also ze hilfe ist komen Swelch bvrger den andern **mit** verdahtem mvote mit dehainer slahte wer iagt ; der mvoz geben zwai / pfunt haller Swer den andern an den Rat missehan=delt mit	MHG	manner	
59	habn zv go=te vnsern schepphre . daz wir ime wandelen alle vnser svnde vnd vnser missetat . vnd ime dinen **mt** allen vli=ze . den sule wir ovch habn zv un=sern ebenxp̄n mt warheit vnd mt xp̄nlicher truowe . Behalde	MHG	manner	
60	eime liechte daz er=schein ober ime als die svnne . Do wart er uunden . vnd wart gewiet zv pabiste mt grozen eren . Dan=noch so ne was die vngenade niht gestillet des gahin todes vnder den luoten . Do gedachte	MHG	manner	
61	hei=lichtuome von latrane zv sente paulo . von danen zv sente petro . vnd sang er die messe selbe . mt grozir inicheit . vnd machte nvon kore von den luotin vnserm heren gote zv lobe vnd zv eren . vnd	MHG	manner	
62	immir me Do nam der degin iosue Ein wazzir vnd goz daz hin Vf di erde alda vor in **Mit** dem sinne als er spreche Swer dise sichirheit breche Di man gote da swuore Daz der also zuvuore Mit	MHG	manner	
63	di list Vnd waren dr an uolkumen Bi den ziten uzgenumen Swaz uon dyanen was geseit An den fabelin mit warheit Von der ein degin uzirkorn Perseus sint wart geborn Vnd geschach bi den geziten sin Beide lant stat	MHG	manner	
64	Vnd viengin in dem strite Einin man bi des zite Wart uil wundere irkant Adonibesech was er genant Den sie mit zornlichin siten An dem libe gar besniten Ich meine hende vnd vuoze abe Do er lant lip vnd sin habe	MHG	manner	
65	der morgenstunde dat wir quemen zuo siner scholen Dit wort sprach bischof Albret wir suolen kuomen mit gesamindin sinnen inde **mit** offenen oren inde mit hangindin herzen	MHG	manner	attribute

MANNER	Example	Language	Frame 1	Frame 2
	mit urlove gesprochen also virleckert dat wir ingeiner ander scholen in begerin dat			
66	quemen zuo siner scholen Dit wort sprach bischof Albret wir suolen kuomen mit gesamindin sinnen inde mit offenen oren inde **mit** hangindin herzen mit urlove gesprochen also virleckert dat wir ingeiner ander scholen in begerin dat is dat wir ingeine	MHG	manner	attribute
67	dat ein bruoder wirt geware . eines an=deren bruoderes heimelicher sunden . der sal in uridesame . unde bruoderliche . mit truwen wisen dar an . dat hei siner misse=dait . kome zuo beruwenisse . unde zuo bige=the . Is auer	MHG	manner	means
68	begunnin des uor genantin spitales under eime segele eines schiffes . datt ein kogke geheizin is da si die siechin **mit** grozer andaht . underbrathin . unde der mit ulize plagin . Dit cleine begin erbarmede den her=zogin uan suuabin	MHG	manner	
69	suele hauin rittere . un wie hei sei suele intpha=in . mit dem seningin in den schierme der ec=clesien . **mit** suonderlicheme gunste . un ouch bestetigin mit antlazin . un mit priuileigin . Suuat in geistlicher gauin uan guoten lue=din	MHG	manner	
70	stent . so suelin sie . zuo deme glra patri nigen mit gemeinelicher neigun=gin des liues . Sie suolin ouch **mit** ulize huotin des . dat ieman . mit wispele oder mit stimme . un ovch mit ungehortenetin ... Der meister	MHG	manner	
71	ze clagene dat du diesen boden niet eirliche intfingis nog in woldis volgen siner warer leren Ey intfeit den boden bit geringe de da sprichit zuo unseme herzen in Jhesu namen amen Nu an einer zit sprach he oug wir suolen	MHG	manner	
72	Radamanten vnd sarpidonem Von den kundit uns daz mere Daz iupiter ir uatir were Durch daz iach di heidinschaft Im mit valsche gotlichir craft Wan sie zu crichen ir zit Taten manic wundir sit Chatinus ein creftir wisir degin Sach man	MHG	manner	

MANNER	Example	Language	Frame 1	Frame 2
73	in der vinster=nisse daz du qemes . vnd vns er=lostes von des tuovels gewalt . vnd habn din dicke gewuonschit mt sufzene vnd mit weinende . Nv bis=t u cuom zv troste vnd zv genaden vns die in der helle habn	MHG	manner	concurrence
74	sich uber mich note un ih ne wesse zestoret wrden si nieht gestunget . si uersuhten mih si spoten min **mit** schalle si girscramoten uber mih mit zanden ire herre wanne sihest du ez irstate die sele min uon ubele ire	MHG	manner	means
75	daz du qemes . vnd vns er=lostes von des tuovels gewalt . vnd habn din dicke gewuonschit mt sufzene vnd mit weinende . Nv bis=t u cuom zv troste vnd zv genaden vns die in der helle habn gelegen vil lange	MHG	manner	concurrence
76	heilige geist kuomen an der morgenstunde dat wir quemen zuo siner scholen Dit wort sprach bischof Albret wir suolen kuomen **mit** gesamindin sinnen inde mit offenen oren inde mit hangindin herzen mit urlove gesprochen also virleckert dat wir ingeiner ander	MHG	accessory	manner
77	. Vmb die des phafen gerent . unt n nieth gwinnen megen . Vmb di erslagn sint . oder begriphen mit gahem ente . Vmb die ligent in unserem frithoue . Vmb alle glovbige sele . Also die collecte sint gordinot	MHG	means	manner
78	schaden nimet . dat hei des ime nith in gelde . Inchein bruoder neme inchein conmendissen ze behaltene . danne **mit** scrifthe . ovf it mach mit fuogen sin . Inchein bruoder sal samenen . oue heissen hueten uremede uihe .	MHG	means	manner
79	441. czuflucht vnd das gemain czaychen der freyhayt , in dem all schuldig , die dahin mit guetter hofnung slyechen vnd hinder dyssen mayen des gecreuczigten herrn jesus sych verpergen , sycher	ENHG	manner	
80	482. saugst u honig von dyssem hochen pinstock des heylligen creucz auf disser plue (.) sing **mit** schallen , dye perg werden tropfen dye suesigkayt vnd dye puchel fliesen mit mylych vnd	ENHG	manner	
81	524. gespans in dem hochen mayen des heylligen creucz perait (.) in das spring vnd sing mit jubel (:) () dys ist mein rue in da wyl jch wanen , wan jch	ENHG	manner	

MANNER	Example	Language	Frame 1	Frame 2
82	544. wyl hallt an peten , so jch gefunden hab mein hercz , wan jch sprych mit durstigkayt , das sein hercz mein hercz ist (.) wan so xpin mein haubt ist	ENHG	manner	
83	551. alls der pabst innocencius in der hystorya von dem halltumd sprycht , so ist pyllych mit aller danckperkayt herwyder czw gedencken , das vnsser pehallter , da er jetzung ann dem	ENHG	manner	
84	566. lanczen , dye auf gesport hat ain sollichen schacz (.) jch gelaub , wen du mit andacht wurst nysten in dyse hol , du werdest nymer heraus czw gen pegern ,	ENHG	manner	
85	627. hernach merers beschriben wirt / (.) Vber das hat der plindt Basil / das Großfuerstenthum mit rhue besessen / (.) Von der zeit Volodimer Monomach / hintzt an Basil , den	ENHG	manner	
86	633. khomen / , das der groß WITOLD , großfuerst in Littn , in vil jaren **mit** grosser mueehe vnd arbait erobert hette / (.) Mit den gefangnen ist der Moscouiter grausamblich	ENHG	manner	
87	754. der Junger lainete an seiner prust im abentmal / , dann , da er sprach **mit** begierd , hab ich begert das Ostermal mit euch zu essen / , hat nit	ENHG	manner	
88	822. , ewer obrister Heerfuehrer , an zweyen Orthen / (.) nemblich: das Lutherische Evangelium habe mit wunderlicher , vnglaublicher schnelle / vnd Behendigkeit / durch die vornembste vnnd meiste Provintzen vnd	ENHG	manner	
89	829. seyn / , ja auch sie selber nicht ; , Dann man eben diese Schmach mit gleichem fug in jhren Busen schieben koente . (.) Vnd die Warheit zu bekennen /	ENHG	manner	
90	844. keines newen Siglens / (.) es ist ein groesserer Glaub ohne Wunder / , alß mit Wunder glauben . (.) 1 . Corinth . 14 . (:) Die Zeichen seind den	ENHG	manner	
91	1128. sprach der zoller (:) () gend den zoll (!) () der wart erstochen , luffend mit gewalt uff brugen zuo dem von Rechberg vnder das tor , erstochend etliche , als	ENHG	manner	

MANNER	Example	Language	Frame 1	Frame 2
92	1203. der wind was so grosß , das er mechtigi grossz linden zuo basel uff burg mit gewalt usß dem grunde huob vnd nider warff des ertzbriesters gericht gar nider geworffen wart	ENHG	manner	
93	1205. alben was mit tilen gedecket , nam der wind die tilen gegen dem Rine anhin **mit** gewalt , warff su mit andrem zimberholtz vber den turn zuo sant alban in den	ENHG	manner	
94	1224. do komend die schinder an su als vil loep vnd grasß vnd fochtend , das die eignossen mit macht komend fur das hus uff den Rein (.) als worend ein teil enit dem	ENHG	manner	
95	1225. su wider hinder sich , jnnen zuo hilffe (.) do vmb zugend die schinder su mit gewalt , das su komend in die kilchen , wurdent vil erslagen (.) donoch komend	ENHG	manner	
96	1237. , von Rinfelden wegen (.) Jten eta p{5} asunptonis marie xlv zugend die von basel **mit** macht , mit cc wegen , karre{6} , mit grossem gezuge gon Rinfelden (.) der	ENHG	manner	
97	1247. zoech der furst mit sime gezuge wider hinder sich vnd legert sich die selb nacht **mit** macht vor krentzach , sluog sine gezelt uff vnd grossen furen (.) Jten des wurdent	ENHG	manner	
98	1252. , zwei schiff am slosß zerschossen (.) Jten der von basel buchsen im slosß wart mit flisß an dz ende geschosß{1}et , das die buchs verfiel , dz su kein schade	ENHG	manner	
99	1982. Senacherib , der Koenig zuo Assyrien / , wie er für Jerusalem gezogen / , mit gantzer macht komen : (.) in dem seind jme auch in einer nacht von Engel	ENHG	manner	
100	2288. Balsam gesundt gemacht het , er satzt alles sein vertrawen in Got / (.) vnd **mit** solchem vorsatz / traff er mit erzuckten schwerdt / Fierrabras vff seinen Helm / eynen	ENHG	manner	
101	2294. , damit er sich des streychs enthalten mocht / , jedoch so traff jn Fierrabras mit solchen crefften / , das vil Pantzer ring von seinem Helm zerstoben / (.) er	ENHG	manner	
102	2296. / (.) () stunde hierauff vom pferd ab / vnd band es an / vnd mit einhelligen gemute traffen sie zuo fuoß / also crefftigklich eynander / , des zu uerwundern	ENHG	manner	

MANNER	Example	Language	Frame 1	Frame 2
103	2411. jar vergeen / , so werden dieselbigen dem Harnisch gewachsen / (.) alßdan moegent jr mit merer macht dan yetzundt wider in Hispanien ziehen / vnd euch dasselbig gantz vnderwuerffig machen	ENHG	manner	
104	2693. . (.) Dis paradoxon von den Antipodibus / von vor an gezeygten hymelsabmessung hab ich mit fleis an zeygen woellen / , das vorige Argument damit zu bestetigen / (.) koenten	ENHG	manner	
105	3482. Eseltreiber / an Seylen zu einem Fenster hinaus . (.) Vnnd sie giengen dieselbe Nacht mit grossem Jammer vnd Leidt / biß auff den Kreynbergk / , den hatte daß mahl	ENHG	manner	
106	808. c (.) so ist niemand verwehrt / , ledig zu bleiben / , wer es mit gutem Gewissen vnd ohn aergernuß thun kan / , wie es dann ein jeglicher vor	ENHG	manner	accessory
107	3797. dye warheyt , So hoere , was dyr der Apostolus Paulus saget (.) Volg oehm mit rechter andacht , Schmecke nuechtern und messig die schrifft (.) Anderst nympst du vor honig	ENHG	manner	accessory
108	2331. Heyden ranten alles fuersich / nach jrem gefallen / (.) Keyser Karle dorfft den Heyden mit der macht nit lenger nach eilen / , wann er besorgt sich einer Halden oder	ENHG	manner	attribute
109	445. durch alle chor der heylligen englen vnd lyeben heylligen des hymelischen vatterlandts , vnd das sy dyr mit schallen in dissem spacieren halfen singen das vinigklych lyedlein (.) es mues sein , das	ENHG	manner	means
110	639. offt gesagt / , Moscouither erweittert sein Land anhaims sitzend / (.) Er aber müge mit grosser seiner müehe vnnd arbait sein Land khaum erhalten . (.) Der Großfuerst Hans hat	ENHG	manner	means
111	690. guete vnnd rainigkhait leben / (.) () das was etwas stiller gesprochen / , Aber mit lauter stimb / (:) () du bist der Khünig der welt vnd erhalt er vnnser	ENHG	manner	means
112	2429. vnder jme Zehen Tausent Heyden / (.) darumb so weiß ich / , das vnns mit gewalt durch zu ziehen vnmueglich / , wann sie forechten keynerley Sturm / (.) vnd	ENHG	manner	means

MANNER	Example	Language	Frame 1	Frame 2
113	2717. vfers / , meynten vns die reyse zu uerhindern / (.) Wir zerbrochen dasselbige wider mit gewalt / (.) es wurd eben mitlerzeit / (.) Wir blieben auff dem truckenen .	ENHG	manner	means
114	3816. / , das von Christo keyn oeberkeyt sey auff gericht in der kyrchen / , mit gwalt tzeuget vnd beuget / , drynget / , tzwinget / , tzerret vnd dennet	ENHG	manner	means
115	481. gewaint , gepust , gelydten vnd gestryten hat , pis er dyr das ewig leben mit recht gewunen vnd verdyent hat , da er hat gesprochen () es ist volpracht ()	ENHG	manner	
116	615. Volodimer den Rochuolochda bekhriegt / vnd den mit zwayen Suenen erschlagen / vnd die Rochmida **mit** gwalt genommen / , nachmals wider seinen brueder gen KHIOW geruckht / (.) Jaropolkh aber	ENHG	manner	means
117	619. seiner Praut im 1383 . Jar . (.) SWATOPOLCH , der das Fuerstenthumb zu Khiow mit gwalt vber khummen / , hat Leut verordent / , die seine zwen Brueder Boris	ENHG	manner	means
118	684. saeligen behalter der gepott der gemain Christlichen Khirchen / , damit er das Volgkh richte **mit** gerechtigkhait . Vnd die gerechtigkhait mit taille / den Armen / (.) Vnd erhalt die	ENHG	manner	
119	659. nit ainn man verloren / (.) Er vber traeff alle Khuenig / vnd Fuersten / mit dem gewalt / , den er hette vnd gebraucht vber die seinigen / vnd das	ENHG	manner	means
120	686. der selben . (.) Vnd damit erlanng darnach das Himlisch Reich . (.) () Nachmals mit lautter stimb spricht er / (:) () Alsda ist dein Macht / vnnd ist dein	ENHG	manner	means
121	809. vnd gehorſamb vnder ainem Obern ſich verlobe vnd folge; , welche doch Christus seiner Kirchen / , als ein Edles Klainod / , mit so stattlichen Lob vnd Verhaissung gerathen vnd commendirt . Darauß nit vbel zu schliessen /	ENHG	manner	means
122	825. / , als wann die Stein abwerths fallen . (.) So hat man disem Gifft mit der Gnad Gottes den Weeg baldt verrennt / , daß es sich nit weitter auß	ENHG	manner	means

MANNER	Example	Language	Frame 1	Frame 2
123	843. Kirchen examinirt vnd approbirt seyn worden . (.) Wann aber etliche gewesen / , die mit falschen vnnd erdichten Wunderzeichen auff gezogen / , muß man darumb alle Wunderzeichen verwerffen oder	ENHG	manner	concurrence
124	448. mayen fur dye thur deiner allerlyebsten muetter marya , dye dyssen schonen mayen an vntterlos mit waineten augen vnd grossem herczenlaid hat an gesechen , da die frucht jrs junckfreulichen leybs	ENHG	attribute	manner
125	1250. genon (.) der furst was selb jm hus , liesß x knechte ab ziechen (.) mit knuwen erbotten su in vmb das leben , doch su muestend sweren , wider die	ENHG	concurrence	manner
126	450. vnd ewangelisten vnd junger xpren (.) stock auch dissen edlen mayen , wan jr etlych **mit** leyblichen augen vnnd sy all mit geystlichen augen dissen haylsamen mayen gegen wyrd geschaut vnd	ENHG	instrument	manner
127	486. da er aus czarter , kintlicher lieb czw got , seinem hymelischen vatter , rueft senlych **mit** lauter stym vnd mit genaigtem , duemuettigem haubt (:) () vatter , in dein hendt	ENHG	means	manner
128	811. herfuer thue / vnd die Ehr GOttes befuerdere auff alle weeg vnd weiß / , **mit** strengem bueßfertigen vnd heyligen Leben / , mit Predigen vnd Buecherschreiben . (.) Weiln aber	ENHG	means	manner
129	Mit welchem Nachdenken er darin las, beweisen dort die vielen angestrichenen Stellen, die zugleich einen deutlichen Beweis davon geben, wie sein Herz voll Dank erfüllt war gegen Gott, der ihn so gnädig durch das Leben geführt hatte.	NHG	manner	
130	Die Vertreter der Labour Party nahmen **mit** viel Verständnis von der Auffassung der SPD Kenntnis, daß die Frage der deutschen Ostgrenze nur im Zusammenhang mit einer gesamtdeutschen Friedensregelung und nicht lediglich in Verbindung mit dem Berlin-Problem erörtert werden sollten.	NHG	manner	
131	Zu gleicher Zeit schwangen die Indios, die den Montezuma umgaben, ihre Waffen und	NHG	manner	

MANNER	Example	Language	Frame 1	Frame 2
	begehrten **mit** viel Geschrei, mit den Spaniern handgemein zu werden.			
132	Mit besonderer Aufmerksamkeit behandelten die beiden Seiten die Lage in Nahost.	NHG	manner	
133	Das warme Interesse, mit dem nicht nur ich, sondern sämtliche Fachgenossen den hervorragenden Arbeiten unseres jüngsten hiesigen Kollegen, Herrn Dr. Ostwald folgen, berechtigt den Wunsch, ihn angemessen plaziert zu sehen.	NHG	manner	
134	Auch in Rom, wo Winckelmann einen Posten an der Vaticana erhielt, zeigte er sich nicht als Musterbibliothekar, und B. bezeichnet es mit Recht für beide Teile als Glück, wenn Friedrich der Große Winckelmanns Bewerbung für das Berliner Oberbibliothekariat nicht berücksichtigte.	NHG	manner	
135	Er dachte daran nicht **mit** besonderer Erwartung, nicht mit einem Überschuß an Energie und neuen Plänen, nur mit einer gewissen Beruhigung.	NHG	manner	
136	"Ich vernehme mit Empörung die entehrende Entscheidung der Nationalen Zensuskommission, die aus den Europäischen Wahlen der Regierungsliste das vergiftete Geschenk eines Mandats macht, das diese nicht durch freie Wahl gewann, weshalb ich den Franzosen das Mandat zurückgebe, das mehrere Millionen unter ihnen mir anvertraut haben.	NHG	manner	
137	Obwohl mir auch nicht absonderlich zumute war, brannte ich mir anscheinend in größter Gleichgültigkeit eine Zigarette an, paffte vor mich hin, als gäb's für mich nichts wie den unsagbar köstlichen Genuß dieser Zigarette, holte mir **mit** ostentativ gemütlicher Umständlichkeit Euer Kästel mit Schokoladenplätzchen - alles nur, um die zitternden Leute zu beruhigen, was mir denn auch einigermaßen gelang.	NHG	manner	
138	All das brachte Kößling langsam und stoßweise hervor und mit verlegenen Pausen zwischen den einzelnen Sätzen.	NHG	manner	

MANNER	Example	Language	Frame 1	Frame 2
139	In demselben Augenblick jedoch, da ihn diese Empfindung anwandelte und er wie in einer wohligen Schwäche ihr ein wenig nachgegeben hatte -, im selben Augenblick wehrte er sich dagegen und suchte blindlings zu dem alten, freudigen Bangen zurück, mit dem er hier eingekehrt war.	NHG	manner	
140	In dieser Weise ist alles in mir verstreut, - die Zimmer, die Treppen, die mit so großer Umständlichkeit sich niederließen, und andere enge, rundgebaute Stiegen, in deren Dunkel man ging wie das Blut in den Adern; die Turmzimmer, die hoch aufgehängten Balkone, die unerwarteten Altane, auf die man von einer kleinen Tür hinausgedrängt wurde: - alles das ist noch in mir und wird nie aufhören, in mir zu sein.	NHG	manner	
141	Die Regierung gab laut The Time am 4. Februar bekannt, daß sie mit Wirkung vom 5. Februar die staatliche Kontrolle der Aufnahme von Krediten und von Wertpapieremissionen durch Inländer aufhebt.	NHG	manner	
142	Er hat ein langes Menschenalter hindurch, sofort nach der Uebersiedlung aus seiner Heimat Gießen nach Frankfurt, für seine politische Ueberzeugung gearbeitet, und zwar nicht nur so nebenher, nicht bei bequemer Gelegenheit und nicht nur wie ein wackeres Parteimitglied, das seine "verdammte" Pflicht und Schuldigkeit tut, vielmehr **mit** ganzem Herzen, mit völliger Hingabe der knappen Freizeit, die ihm der Beruf ließ, - er war ein angesehener Beamter der Deutschen Vereinsbank , - und mit so starker politischer Begabung, daß die Rührigkeit, die entfaltetevorbildlich Er hat dem Frankfurter Demokratischen Verein als dessen Schriftführer, man kann sagen: jahrzehntelang geleitet, die Auswahl des Versammlungsstoffes und der Redner getroffen, die Werbung und die Wahlen organisiert, die Presse informiert, für die Parteikasse gesorgt und mit den Obmännern aller Bezirke die persönliche Fühlung gehalten.	NHG	manner	

MANNER	Example	Language	Frame 1	Frame 2
143	Mit welcher Freude kann man sich dann anstrengen in einem Berufe, der so angenehm ist!'	NHG	manner	
144	Claudius zeigt die Konflikte der neuen Produktionsverhältnisse in realistischer Weise, wenn auch mit optimistischer Betonung.	NHG	manner	
145	Es gibt mir eine innere Genugtuung u. Wärme, daß ich mit ruhiger Gewißheit sagen kann Hettner und ich.	NHG	manner	
146	Da er im zweiten Jahre auf der Tertia saß, mußte er naturgemäß mein Mentor werden, und dies Geschäft hat er so gründlich besorgt, daß es in den nächsten zwei Jahren keinen dummen und wüsten Streich in der Klasse gab, in den ich nicht mit Zagen und Widerwillen verwickelt gewesen wäre.	NHG	manner	
147	Ähnlich verhält es sich mit der Unterscheidung in gezielte und ungezielte Maßnahmen.	NHG	manner	
148	Jeder, der mit der Maturitätsprüfung seine Gymnasialstudien abgeschlossen hat, klagt über die Hartnäckigkeit, **mit** welcher der Angsttraum, daß er durchfallen werde, die Klasse wiederholen müsse u. dgl. ihn verfolgt.	NHG	manner	
149	Der Kampf der Völker der Welt gegen die Hegemonie der Supermächte entwickelt sich mit aller Macht.	NHG	manner	
150	Nicht grundlos berichten darum italienische, serbische, vor allem russische Volksüberlieferungen von Räubern **mit** einer anderen Wertung als die Polizeiberichte; Schillers Räuberstück - mit dem Motto: In tyrannos! - ist nur die sozusagen klassische Erscheinung in einem Schrifttum, worin Brigant und Brutus ihre Gestalten tauschen konnten.	NHG	manner	
151	Das ist eine sicherere Fahrt als über Oran und der Zeitunterschied gering in jedem Fall. -- Also du hast mich eifrig verhandeln lassen, dachte ich, immer mit einer Rückversicherung.	NHG	manner	

MANNER	Example	Language	Frame 1	Frame 2
152	Der amerikanische Botschafter in Seoul, Walter P. McConaughy, veröffentlichte laut US-Feature Service am 18. April eine Erklärung, in der zum Ausdruck gebracht wurde, daß die Vereinigten Staaten die Entwicklung in Südkorea mit großer Besorgnis verfolgten und hofften, daß die Ursachen für berechtigte Klagen beseitigt und Recht und Ordnung wiederhergestellt würden.	NHG	manner	
153	Der wuchtige Ernst, mit dem uns die Barockarchitektur entgegentritt, läßt die Renaissance bald vergessen.	NHG	manner	
154	Ich möchte an dieser Stelle **mit** allem Nachdruck erklären, daß wir entschlossen sind, auch mit den osteuropäischen Völkern für alle Zukunft in guten nachbarlichen Beziehungen zu leben, und die Fragen, die noch zwischen uns offen sind, nur auf friedliche, gerechte und menschliche Weise zu lösen.	NHG	manner	
155	Herr Franz Werfel hat ganz recht, zu versichern, daß ihn das menschliche Problem an sich wenig interessiert, aber ich weiß mich, wie er gleichfalls mit Recht vermutet, von der Rückständigkeit eines solches Interesses, pro domo et mundo, nicht ganz frei und werde ihm beweisen, wie übertrieben seine aushilfsweise Gefälligkeit war, den bürgerlichen Komment gegen mich schützen zu wollen, wiewohl es sich weniger um diesen als um den menschlichen handelt.	NHG	manner	
156	Er kommt uns immer mit geradezu herzlicher Freundschaft entgegen.	NHG	manner	
157	In Wirklichkeit landen wir heute **mit** der gleichen Sicherheit, mit der wir starten und fliegen."	NHG	manner	accessory
158	Seine Worte, die, während er Antwort gab und auch späterhin, aus der Finsternis drangen, schienen in ihrem Tonfall ein Lächeln zu enthalten, das ihn unvergleichlich viel deutlicher machte als der geistesgegenwärtige Zugriff, mit dem er sich eingeführt hatte.	NHG	manner	means
159	Geht es aber darum, das Bildungsgesetz **mit** minimalem Transformationsaufwand zu formulieren, so ist das mit den beiden	NHG	manner	means

MANNER	Example	Language	Frame 1	Frame 2
	Elementetripeln formulierte Erzeugendensystem die optimale Lösung.			
160	Dann begeht die junge Frau aus falscher Schamhaftigkeit törichte Sachen, die natürlichen Bedürfnisse des Körpers werden vernachlässigt und mit fast zum Springen gefüllter Blase und Darm geht und fährt sie von Ort zu Ort.	NHG	attribute	manner
161	Die Oberin tat einen seltsamen Satz und schnappte mit weit geöffnetem Mund wie eine dicke, schnellende Schleie nach den kurzen, schnurrenden Sätzchen, welche Eustachia entließ; dann fiel sie, ohne ein Wort zu sagen, in die Sammetpolster zurück und griff nach dem Rosenkranzkreuz.	NHG	attribute	manner
162	Schöne Literatur tauchte **mit** jahrzehntelanger Verspätung auf, und an »weltlichen« Büchern kamen zwischen 1840 und 1850 nur drei »öfter« in Nachlässen vor: Gellerts Fabeln und Schillers Gedichte sowie Knigges »Umgang mit Menschen« - nämlich je zweimal.	NHG	concurrence	manner
163	»Ich nehme das mit,« stammelte sie **mit** zuckenden Mundwinkeln und war hinaus.	NHG	concurrence	manner
164	So gleicht in dieser Weltansicht die Sprache der Sibylle, die, nach Heraklits Wort, **mit** rasendem Mund Ungeschminktes und Ungesalbtes redet, die aber nichtsdestoweniger mit ihrer Stimme durch die Jahrtausende reicht:	NHG	instrument	manner
165	Dann zog sie mit ruhiger Hand die schnurgerade Schnittlinie bis zum Kiemenansatz.	NHG	instrument	manner
166	Man wollte bemerkt haben, daß die Prinzessin eine saure Miene machte und die Begrüßung des Bräutigams nur mit einem scharfen Kopfnicken erwiderte.	NHG	means	manner
167	Mit schleppender Stimme, sonst aber ohne ersichtliche Beschwerden, startete Breschnew dabei eine Friedensoffensive, an der nun auch sein Leibarzt aktiv teilnimmt.	NHG	means	manner

MATERIAL	Example	Language	Frame 1	Frame 2
1	in abur : sum mán uuas otag inti garauuita sih **mit** gotauúebbę inti mit lininimo inti goumota gitágo berahto . Inti	OHG	material	
2	sum mán uuas otag inti garauuita sih mit gotauúebbę inti **mit** lininimo inti goumota gitágo berahto . Inti uuas sum árm	OHG	material	
3	Lazarus , cum úz !Inti sliumo framgieng thie dar uuas tót , gibuntan hanton inti fuozin **mit** strengin inti sin annuzi mit sueizduohu gibuntan . Tho quad	OHG	material	
4	, gibuntan hanton inti fuozin mit strengin inti sin annuzi **mit** sueizduohu gibuntan . Tho quad in ther heilant : erloset	OHG	material	
5	imo alla thia hansa , inti inan intuuatenti giuuatitun inan mit gotouuebbineru tunihun inti rót lahhan umbi bigabun inan . Inti	OHG	material	
6	Úzgangante thie iungiron predigotun , thaz sie riuua tatin , inti managa diuuala úz vvurphun , inti salbotun mit olu manage siohhe inti heiltun .	OHG	material	
7	Ein habeta in imo diuuala giu managa zíti , inti mit giuuatu ni giuuatita síh noh in huse ni giuuoneta ,	OHG	material	
8	. Uozzirnita inan Herodes mit sinemo herige inti bismarota giuuatitan **mit** uuizzu giuuatu , inti uuidar santa nan zi Pilatuse .	OHG	material	
9	Thaz sî îu zi zeichane , thaz ir findet kind mit tuochum bivvuntanaz inti gilegitaz in crippa . Thô sliumo uuard	OHG	material	
10	uuinte giuuegita ? Zi hiu giengut úz sehan ? man mit uueihhen giuuatin giuuatitan ? senu thie in diuremo giuúate sint	OHG	material	
11	. Thó quad ín ther heilant : fullet thiu faz mit uuazaru . Inti sie fultun siu únzan enti . Thó	OHG	containment	material
12	Maria habenti salbfaz salbun fon narthu gitana diura , inti gibrohanemo goz ubar sin houbit linentes , inti salbota sine fuozi inti suarb mit ira locon , inti thaz hus uuas gifullit fon themo	OHG	instrument	material
13	thiu da salbota trohtin **mit** salbun inti suuarb sine fuozi mit ira fahsu ; thera bruoder Lazarus uuard cumig . Tho	OHG	instrument	material
14	. un an deime liue . Der dar groze armuothe an sinir gebuort ane huop . da man in bewant mit cranchin duocherin . Dat armuode uolget ime ouch sin leuin mite . bizdat er ouch nakeit gehinch durch uns	MHG	material	

MATERIAL	Example	Language	Frame 1	Frame 2
15	brovdere enbizin . un sol ouch in an den suon=tagin . die epistelin . un dat ewangeliun lesin . unde **mit** deme wihewazzre besprengin . un zuo in gein mit p̣cessione . In anderen spitalin sal man in alle tage minecliche	MHG	material	
16	prister . den manteil mit deme cruce geuen . der da gesegenet si . mit der gewonlicher senungen . unde **mit** deme wihewazsere besprenget . want man mit deme cruce den abeit disses ordenes enphehet Wie man dei kint zuo diseme	MHG	material	
17	bestien mit unsen . ane des ouersten urlouf . Inchein bruoder . sal heizen machen kirchen . nouch huos . **mit** kalke . ane des meisters . oue des lantconemdures uorlouf . Dei bruo=dere . dei des beduorfen . dat si	MHG	material	
18	dar zvo saffran vnd saltz zvo mazzen . vnd tuo sie zvo den viuer vnd lazze sie backen glich heiz mit ein wenic smaltzes gib sie gantz hin daz heizzent kueniges huenre wilt du machen ein guot lebern . Nim ein	MHG	material	
19	. dar zvo fuelle die hut / vnd brat in vnd wuege daz haubt / zvo dem ale cleide in mit einen duennen teige vnd ein blat von eyern vnd mach in dr uf . roest in vnd gib in hin	MHG	material	
20	. laz sie kuln snit sie an mursal vnd stecke sie an einen spiz brat sie wol vnd beslahe sie **mit** eyern vnd mit krute gib sie hin . Ein geriht von vischen . Nim einen frischen hechde loese im abe	MHG	material	
21	vnd guez ez in ein pfannen vnd laz ez sieden vntzdaz ez dicke werde vnd mach ez . gel **mit** saffran . vnd feizt mit butern vnd laz ez denne kueln vnd snide es zvo murseln vnd stec ez an	MHG	material	
22	pfannen vnd laz ez sieden vntzdaz ez dicke werde vnd mach ez . gel mit saffran . vnd feizt **mit** butern vnd laz ez denne kueln vnd snide es zvo murseln vnd stec ez an einen spiz vnd laz ez	MHG	material	
23	kueln vnd snide es zvo murseln vnd stec ez an einen spiz vnd laz ez braten vnd beslahe ez denne **mit** eyern vnd mit guotem krute vnd gib s hin fuer gebratene milich . Ein condimentlin Mal kuemel vnd enis mit	MHG	material	
24	es zvo murseln vnd stec ez an einen spiz vnd laz ez braten vnd beslahe ez denne mit eyern vnd **mit** guotem krute vnd gib s hin fuer gebratene milich	MHG	material	

MATERIAL	Example	Language	Frame 1	Frame 2
	. Ein condimentlin Mal kuemel vnd enis mit pfeffer vnd mit			
25	fuelle vnd versalt z niht / . Einen krapfen . So du aber wilt einen vastenkrapfen machen von nuezzen mit ganzen kern . vnd nim als vil epfele dor under vnd snide sie wuerfeleht / als der kern ist vnd	MHG	material	
26	vnd nim als vil epfele dor under vnd snide sie wuerfeleht / als der kern ist vnd roest sie wol **mit** ein wenig honiges . vnd meng ez mit wuertzen vnd tuo ez vf die bleter die do gem=aht sin zvo	MHG	material	
27	ez wol mit guoter mandelmilich . vnd mit risemele . vnd wol gesoten aber ein vastenmuos gemachet wol **mit** mandelmilich . vnd wol gemenget mit rismele . vnd daz suede wol vnd versalt z niht . Ein	MHG	material	
28	lege in in einen kesenapf / vnd mache in . vnd lege in denne vf ein teler bestrauwe in mit eime zuckere . daz heizzet ein mandelkese . Einen mandelwerke . So du denne wilt machen einen mandelwecke . so	MHG	material	
29	hallern vmb daz as . vnd vmb die rinnen Von vngrischen riemen Man schol auch . kain dehain vngerische Riemen mit alvn machen swer ez tuot der mvoz geben ain halb pfunt haller ie von der haut Vnd si sol auch	MHG	material	
30	pfunt haller ie von der haut Vnd si sol auch nieman hie vaile haben weder burger noch der gast die mit alvn sein gemachet bei der vorgenanten puoze Ez sol auch chein schuhster dheinen newen schuch hie machen er habe danne	MHG	material	
31	daz ist der heilige crist . Jch geb vch ein warzeichen . Jr sult vinden ein nvowe geborn kint **mt** tuochen be=wuonden . daz ligt in einer krippen . zvhant do er diz hatte gesprochen . do er=schein mt im	MHG	material	
32	so stecke do durch einen spiz vnd leg ez zvo dem viuere vnd beslah ez eins **mit** eyern vnd eins mit smaltze mit zwein swamen also lange bizdaz ez singe vnd rot werde vnd gib z hin . Ein guot	MHG	material	
33	Nim lampriden vnd snit sie an sehs stuecke daz mittelst stuecke daz mache minner danne die andern stuecke besprenge ez mit saltze vnd leg ez	MHG	material	

MATERIAL	Example	Language	Frame 1	Frame 2
	vf einen hultzinen rost / brat sie gar . nim daz mittelste stuecke . als ez			
34	vaste viuer dor vnder vnd laz in werden rot / so tuo daz e du in abe nemest betraufe in mit butern vaste vnd gib in hin . Ein guot fuelle . Nim mandelkern mache in schoene in siedem wazzer vnd	MHG	material	
35	suezze milich vnd sehs totern . vnd zwei haubt knobelauches die groz sint vnd schele die schone vnd stoz sie **mit** ein wenic saltzes vnd menge daz mit der milich vnd mit den totern vnd saffran tuo dar zvo . vnd	MHG	material	
36	groze mt irm liben kinde deme heili=gen criste . alda genas sie des seiligen kindes . vnde bewant iz **mt** snoden tuochen vnde leget iz in eine krippe . zv der selbin stunt erschein der heilige engele den hirten vf	MHG	material	
37	vnd back ez harte so stecke do durch einen spiz vnd leg ez zvo dem viuere vnd beslah ez eins mit eyern vnd eins **mit** smaltze mit zwein swamen also lange bizdaz ez singe vnd rot werde vnd gib z	MHG	material	
38	langes vnd zẘ schinen dar veber vnd lege in vf einen hueltzienen rost / mache in warm vnd besprenge in mit butern mache einen teyc von mele vnd von eyern dar zvo tuo gestozzen pfeffer vnd saffran vnd saltz zvo mazzen	MHG	material	
39	hiemel dat ein wenich minre si dan die engele inde die heiligen inde also vil minre als man gecleit is mit dieser menscheide Ein ander wort sprach he ouch van Job Des duovels vuorganc de deit dat mere wallen dat geschiet	MHG	material	
40	vnd nim vnderwahsen fleisch gesoten vnd nim pfeffer vnd saffran daz stoz zvosammene vnd mache ez weich . mit roen eyern . so mache ein blat von eyern vnd zvoteyle daz fuelle dar vf die matrien daz glich	MHG	material	
41	wol gemenget / so er allerbeste hat / . die koste git man kalt . oder warm . Ein mus mit lauche Ein muos **mit** lauche . nim wizzen lauch vnd hacke in cleine . vnd meng ez wol mit guoter	MHG	attribute	material

MATERIAL	Example	Language	Frame 1	Frame 2
42	444. dye erfundung des heylligen creucz des haylsamen mayen (.) das h creucz xpen sollt u mit ainem hymelischen rossenkrancz laden all dein guot freundt , die du hast in dem hymelischen	ENHG	material	
43	547. jch mit einander mug sechen vnd volpringen deinen wolgefalligen wyllen (.) alls vmbstock dein mayenpedlein **mit** den schonen papelrosen , dapey du petrachten solt dye gestallt der aufgethanen seyten vnd dye	ENHG	material	
44	548. mynigklychen gespansen nit vm fachen an dem heyllygen creucz (.) jtem vmbstock auch dein mayenpad mit dem edlen kraut rosmarin , das vast ain wolriechentes , kostlychs kraut ist vnnd gesund	ENHG	material	
45	624. im dritten Jar darnach so hart erlegt / , das Dreytzehentausent schrit weit das Erdtrich mit todten Coerpern belegt war / (.) Jm andern jar nach dem khame TACHTAMISCH , der	ENHG	material	
46	640. worden / (.) Der Hans hat am ersten sein Stuel oder gesaeß zu der Mosqua mit gemeüern erpaut / (.) den weibern ist er so haessig gewest / , wann jme	ENHG	material	
47	749. so hoch gupfet als die gemain colpatn vnden herumb als zwayer zwerchen finger praidt / mit Haermblen verpraembt / , darob etliche pildlein der heiligen / , ist rott meines gedenckhens	ENHG	material	
48	1204. wonde , die welt wolt under gon (.) der nuwe turm zuo sant alben was **mit** tilen gedecket , nam der wind die tilen gegen dem Rine anhin mit gewalt ,	ENHG	material	
49	1970. hauptman , erstochen / , daselbsten im Wald in ein tieffe gruoben geworffen / vnd mit einem grossen stainhauffen bedecket worden . (.) Gleichwol hat jme Absolon [COMMA] , da er	ENHG	material	
50	1987. , mag ab nemmen . Gleichwol der thail , so noch steht / vnd oben mit bley bedecket / , zimlich groß / , vnd ein gebaow , so herrlich vnd	ENHG	material	
51	1997. Kirchen / , in welcher gleich aussen am Chor zuo bayden seyten zwen Altaer / mit schoenen grossen Marmelstainen bedecket / zuo sehen / , auff deren dem ainen zur lincken	ENHG	material	
52	2427. gar sorgklich / , die Stattmauren seindt von Marmel gemacht / , befestnet vnd vmbegeben mit	ENHG	material	

MATERIAL	Example	Language	Frame 1	Frame 2
	grossen Thuernen / (;) vndter der Brucken hin lauffet eyn greweliches vngestuemes wasser / ,			
53	2428. steet ein Thuorn erbawen / , des sterck vnueberwindtlich ist / (;) die Pfort ist mit starcken Eisen verbunden / (.) dieser Brucken vnd Stat huetet eyn grosser erschrecklicher Heyd /	ENHG	material	
54	611. . mit hinderlisten vm bracht / vnnd aus desselben Hiernschallen ein Tringkhgefaeß gemacht / , **mit** Gold beschlagen / , vnd mit puechstaben darein setzen lassen dise maynung . (:) Frembdes	ENHG	material	attribute
55	630. sich des Regiments gantz vnder standen / , aber nit wie jr gewonhait ist / mit jren Clainaten getziert / noch ein gesetzt / vnnd hat seinen Tauffnam Gabriel veraendert /	ENHG	material	attribute
56	2267. , sein antlitz **mit** seinem mantel bedeckent , in die Cappel / , vmb fasset mit seinen armen das Crucifix vnd sprach also : (:) () Mein Herr vnd Got /	ENHG	material	instrument
57	1989. zuo finden . Dann jenwendig die gantze Kirchen mit schoen weißfarben Marmelstainen gepflestert / vnd **mit** so uilen gantz Marmorin hohen vnd grossen seulen / , deren jede inn 9 spannen	ENHG	material	
58	625. dein vrthail geben / (.) Nun aber hab ich deine brieff / , die du mit deinem gulden Sigil beuestnet hast / , das du mich woellest in das Großfuerstenthumb ein	ENHG	material	means
59	1995. moegen / (.) Amen . (.) Dise hüle ist vnden vnnd an seyten herum / mit schoenen , grawen Marmelstainin , langen Taflen / von blawen wassern gantz herrlich vberzogen /	ENHG	material	
60	2287. Oliuiern den tag fristen wolt (.) vnd da Oliuier sahe / , das sich Fierrabras mit dem Balsam gesundt gemacht het , er satzt alles sein vertrawen in Got / (.)	ENHG	material	
61	2692. , vber dem wasser herauß gehe / (.) Das ander teyl aber sei vnden gar mit dem meer vnd wasser also vmbgeben / , das da niemant wonen kan . ,	ENHG	material	
62	557. seiten xpin , so hat er hin genumen dye vinsternus vnsser gemuete vnd hat gerainigt mit flus der gotlychen mylltigkayt (.) da der ryter	ENHG	material	means

MATERIAL	Example	Language	Frame 1	Frame 2
	longinus sein allerscherpfeste lanczen erschut hat ,			
63	1988. ist / , das nit bald dergleichen zuo finden . Dann jenwendig die gantze Kirchen **mit** schoen weißfarben Marmelstainen gepflestert / vnd mit so uilen gantz Marmorin hohen vnd grossen seulen	ENHG	attribute	material
64	Steil reckten sich die Schornsteine an der Seite ihres Weges, jahrelange Ablagerungen von Karbidstaub hatten ihre Mauern mit einem schmutziggrauen Film bedeckt, so daß nicht einmal mehr die Fugen zwischen den Steinen zu erkennen waren.	NHG	material	
65	Den Fonduetopf mit einer Knoblauchzehe ausreiben, den Wein zufügen und auf dem Feuer heiß werden, aber nicht kochen lassen.	NHG	material	
66	Silberplattierte Gegenstände sind aus anderem Metall mit aufgewalzter Silberschicht.	NHG	material	attribute
67	Jedenfalls war die Anzahl der Jahre, die er Protestant gewesen war, weit überschritten, und er pflegte seitdem seine Wunden Rosen zu nennen, mit denen er der Jungfrau Maria Füße bekränze, und diese zähle man nicht.	NHG	material	
68	Sie lagen in 3 großen, **mit** Balken überdeckten Gruben und enthielten die Skelette von 11 Pferden mit Zaum- und Sattelschmuck aus Gold und Silber.	NHG	material	
69	In einem andern waren eine Menge winziger Hüte aller Zeiten und in allen Formen und Farben aufgeschichtet, und wieder ein anderer enthielt einen ganzen Bienenkorb aus Wachs, mit feinen wächsernen Blumen verziert, darauf Bienen von der gleichen Materie saßen.	NHG	material	attribute
70	So überkleben Angestellte der Stadtverwaltung während der Arbeitszeit - unter Verwendung offizieller Autos - regelmäßig alle nichtkommunistischen Wahlplakate mit KP-Affichen : Marchais allüberall - Big Brother sieht dich an.	NHG	instrument	material

MEANS	Example	Language	Frame 1	Frame 2
1	tatim si kehlauffan , min duruh qhueman . Uzzan frahemees mit forasakin truhtinan qhuedentes imu : " truhtin , huuer puit	OHG	means	
2	, noh meer uuizzi murmolontero ana hlauffit , ibu nalles mit kenuhtsameru tati puazzit .	OHG	means	
3	, daz bizeichinet : suenne unseriu muot imo kilúteret uuerdent **mit** dera heiligen bredige unte mit demo brunnen dera zahire ,	OHG	means	
4	die dir lebent chuosclihen , rehte unte einualtlichen unte andere mit íre gûoten siten lerent unte leitent zi demo euuigan libe	OHG	means	
5	. Daz andere daz sint die uuitiuun , die sih mit gotis helfa inziehint dere uuerltlichen vuunne , in der si	OHG	means	
6	ih scolti . Daz ih mih selbun mit lustin enti **mit** argen uuillon enti mit argen gidanchon piuual enti unsuprita mer	OHG	means	
7	ih mih selbun mit lustin enti mit argen uuillon enti **mit** argen gidanchon piuual enti unsuprita mer dan ih scolti .	OHG	means	
8	dicatur . uel est diffinitio determinatio rerum et explicatio . mit tero uns geougit uuirdit unde vragenten gantwurtit wirdit , waz	OHG	means	
9	Den lon vurht ich sere , wand ich gesundot han **mit** gedanchin , mit wortin , mit werchin : daz ruiwit	OHG	means	
10	ich sere , wand ich gesundot han mit gedanchin , mit wortin , **mit** werchin : daz ruiwit mich unde irgib	OHG	means	
11	wand ich gesundot han mit gedanchin , **mit** wortin , mit werchin : daz ruiwit mich unde irgib mich schuldich unsirme	OHG	means	
12	. Disa keba alla uuonéten in Christo Ihesu insament . mit sinemo uuistuome scuof unta irlosta er unsih unda screib unsera namen in den himelun	OHG	means	
13	Sie tho thana gangenti festinotun thaz grab biinsigilenti then stéin mit bihalterin .	OHG	means	
14	diu sin heiligista sela do fone demo lichnamen ze helli nider fuor mit dero sinero gotelichen chrefti , daz er danna irlosta alla	OHG	means	
15	chom , unde er do irstuont fone demo tode , mit sin selbes chrefte , unde er sinen iungeren irskein ,	OHG	means	

MEANS	Example	Language	Frame 1	Frame 2
16	mit den uuerchen leidir mir ferlougenot sues ih fergehen habe **mit** den uuorten dero gloube . uuanda ih fasto gelouba ana	OHG	means	
17	in bestumbelenne , in ze pliuuuenne , in manslahte , **mit** getate ioh mit uuillen , in manigemo mortode , in	OHG	means	
18	sint gagen mâzzot diên iudôn , diê síh iu beuuúllan mit unsûberen uuerchan vnde dúréh âhton íro fadér Christum únde iro	OHG	means	
19	mit allên dûgeden , mit mínne , mit driuûon , mit allero reinnussedo , den dir diûual nieht bidrêgen nemag , uuane uber sih selbo gihéfte **mit** uuine unde mit hore unde mit allen dien beuuollennussedon , die demo diûuéle lîhchênt	OHG	means	
20	inti santa sih in then séo . Thie andere iungoron mit ferennu quamun ni uuarun sie ferro fon érdu , oh	OHG	means	
21	brahtun imo manage diuuala habente , inti áruuarf thie geista mit uuortu inti alle ubil habente giheilta . Thaz vvurdi gifullit	OHG	means	
22	, thiu n irfuor nio fon themo temple , uzouh **mit** fastun inti mit gibetu thionota tages inti nahtes . Thiu	OHG	means	
23	in hellauúizi . Eno nú ia coufit man zuene sparon mit scazzu ? inti ein fon then ni fellit ubar erda	OHG	means	instrument
24	do chom selbo unser herro der filius dei unte pichêrte **mit** sinera euangelisgen prediga unte mit sinen zeichenin die heidinen ,	OHG	means	
25	der filius dei unte pichêrte mit sinera euangelisgen prediga unte **mit** sinen zeichenin die heidinen , uona den dir iruuohs diu	OHG	means	
26	unzi an daz , daz iz intluhte der filius dei mit demo kiuualte sinere gotheite , so daz iz do uuider	OHG	means	
27	mer suigeta dan ih scolti . Daz ih mih selbun **mit** lustin enti mit argen uuillon enti mit argen gidanchon piuual	OHG	means	
28	· du bist dir alter hun ummet spaher spenis mih mit dinem wuortun wili mih dinu speru werpan · pist also	OHG	means	
29	unseriu muot imo kilúteret uuerdent mit dera heiligen bredige unte **mit** demo brunnen dera zahire , dare nah chumet er unte	OHG	means	instrument

MEANS	Example	Language	Frame 1	Frame 2
30	arbeiten nah demo himilriche unte si doh dara nieth nichomen e der filius dei her in uuerlt chom unte in iz intlouh mit sinera martyre . Die phenninge pizeichinent daz himelrih , die	OHG	means	
31	gachoron , soso sin uuillo si , uzzan soso uuir **mit** dinera anst enti mit dinem ganadon ubar uuehan mekin .	OHG	cause	means
32	scolta uuirchen . ih fergoumolosata daz ih sculdic uuas . mit minan fuozun gien ih dar in urloubit ni uuas .	OHG	instrument	means
33	Inti tatun es thinc , thaz sie then heilant fiengin mit feihane inti ersluogin . Quadun tho : nalles in themo	OHG	manner	means
34	ubilan sih suannet . . . . unuuirdigan quedenti imu mit uuizzagin : " ze neouuiehti keprauhoter pim . . .	OHG	togetherness	means
35	herzin kelaube minna theononte sih . . . . qhuedenti mit uuizzagin : " ih keuuisso pim uurum . . .	OHG	togetherness	means
36	mit eren eruullen mach . er ist in den tagen des iares der oberst . in hat got selber geeret **mit** siner chunft . un mit siner mennischeit . An disem tage wartet got uon himele hern erde . un sah	MHG	means	
37	er ist in den tagen des iares der oberst . in hat got selber geeret mit siner chunft . un **mit** siner mennischeit . An disem tage wartet got uon himele hern erde . un sah die not sines livtes .	MHG	means	
38	siner mennischeit . An disem tage wartet got uon himele hern erde . un sah die not sines livtes . mit sinem ainborn sun hat er uns fride gesendet und urlosunge . Vnser not was div arbeit des ewigen todes in	MHG	means	
39	uon dem herren adam und uon siner gemahelen der ersten muoter der frovwen eua . den uns nu enphvort hat **mit** dem ewigem leben . mit dem heiligem christe den si hivte enphangen hat div ander muoter scena MaRia . Div	MHG	means	
40	heilige lere . braht in so wider ze sinen alten chreften . die er het e . er unsern herren **mit** der ungehorsam uermant . Mit dem sichen werden wir alle uon unserm sihtum wol beruht . ob wir iz mit	MHG	means	

MEANS	Example	Language	Frame 1	Frame 2
41	. singet ime gesanch niwez wol singet im mit rufe . want rehte ist wort gotes un elliv werch sin **mit** triwen . er minnet die genade un daz rehte genade gotes folle ist div erde mit sinem worte die himele	MHG	means	
42	vnde hundirt . unde nuonzech iar warin in den cidin duo ackers was besezzin . uan den cristen . unde mit der godis help in widir gewunin wart . uan den handin der ungelovuigin . zov den seluin cidin . in	MHG	means	
43	. dat her abraham der groze patriarcha streit um=be sinnin brovdir herin loth . der geuangin was . unde in **mit** stride irloiste . uan der ge=uanchnisse . An der widiruerte begeginde ime melchisedech mit sime prisante un do offente der	MHG	means	
44	. diu gesiht bezeichent uns dat . die ecclesie eiclich rittere nu solin haben der begerungin si der ecclesien uiende mit craft ze urtriuene . Zvo disime gezucnisse vv=geit sich wol . dat bi moyses unde Josuves ci=din . die rittere	MHG	means	
45	spitale haue . ze allin citin . auer anderswa . da man ein gemachet spitail wolte geuin deme hus . **mit** sime gelte . da mohte der landescomeduer mit deme raite der wizegestin bruodre . dat niman . oder lazen .	MHG	means	
46	stat enphain . vnde ovue hie ith guodes hait . dat sol der brvoder . der des spitales pligit . mit schrifte behaltin . der sol ouch den siechen manen . dat er sorueltlich si . umbe dat heil sinir selin	MHG	means	
47	den werltlichen lueten kunden . unde dat uolc dar zvo manen . dat si ze helfin kuomin den spitalin . **mit** den almuosin . die seluen suolin ovch so guotes leuenis sin . dat sie iht mit ir boesen bilde .	MHG	means	
48	sie spre=chen . uuor die gecide unser frowen . vnde uuant der leigebruodre . genuoge geleret sint . sowilgir **mit** urloiffe des ouersten . mit den paffin . die daigecide oue die gecite uan uon=ser urowen . an den	MHG	means	
49	urowen . an den seilmin . un anderen dingen . die zuo deme ambete gehorent der paffin . sprechen welle mit urlov=ue . die sint erlazin	MHG	means	

MEANS	Example	Language	Frame 1	Frame 2
	der zalln der pater nren . die den leigen sint gesezet . Den bruoderen die			
50	. den sal man billiche desde hertlicher duon buozen . wie die bruodre sulen bezzeren ir misse=tat . Swelch bruoder mit wortin . oue werken oue in ander wis in cleine missedait geuellet . de erbeide sich des sinem ouersten .	MHG	means	
51	. uan deme glouwen . oue dat ime der aidem stinche . oue einis boses wi=ues suon si . oue mit susgetanen worten scheldin . Wie de bruder sulen alle suntage capitel halden . Die bruodere sulen alle sundage . da	MHG	means	
52	guoit O we is dit guoit dat sprechent alle die heiligen it si Got O guoit inde guode guoide mich **mit** diner guoiden so werde ich guoit inde edel mit dinen engelen inde mit dinen heiligen zuo intfeine dat guoit dat	MHG	means	
53	Got O guoit inde guode guoide mich mit diner guoiden so werde ich guoit inde edel mit dinen engelen inde **mit** dinen heiligen zuo intfeine dat guoit dat du biz Inde etzelich wort wart gesprochen von heydenen inde ein de sprach	MHG	means	
54	si gevuolet dat Godes wille in ire levit bit weelden Ouch sprach he dit wort alse du dich wolt virgain **bit** dinen gedenken so salt u din herze setzen under die flammende Seraphin inde salt sien in Gode in wat eren	MHG	means	
55	sin wanne du dich oitmuodigis vuor deme priestere dat Got geginwordich is inde reinichit dich nochdandat die sunden **mit** retheme ruowen inde mit buozen werdent virgeven nochdan blivint in uns vuonden dat is quickinge der sunden inde nekunge	MHG	means	
56	oitmuodigis vuor deme priestere dat Got geginwordich is inde reinichit dich nochdandat die sunden mit retheme ruowen inde **mit** buozen werdent virgeven nochdan blivint in uns vuonden dat is quickinge der sunden inde nekunge zuo deme boseme dis	MHG	means	
57	in wart nie mensche uoverhaven want sente Marie aleine dar umbe alse der sieche alwege begert des arcietirs dat he **mit** der arcedien virdrive die hitzede also salt du alwege Got	MHG	means	

MEANS	Example	Language	Frame 1	Frame 2
	bidden dat he mit deme vluoze siner genaden virlezche in			
58	alwege begert des arcietirs dat he mit der arcedien virdrive die hitzede also salt du alwege Got bidden dat he **mit** deme vluoze siner genaden virlezche in dir die hitze inde alle quickinge der sunden inde wirke sine Gotliche werc in	MHG	means	
59	pfeffer vnd saffran vnd saltz zvo mazzen als der visch gar heiz si . so slahe den teyc dor vf mit eime swanke riche vaste viuer dor vnder vnd laz in werden rot / so tuo daz e du in abe	MHG	means	
60	geben der da vrkauft vnd halbe der da kauft . vnd si suln auch kaine flaisch geben noch vailsen danne **mit** der burger wage noch der burger gesetzte . vnd daz selbe geloete sol gezaichent sein mit der burger zaichen .	MHG	means	
61	ainen haller ze puoze Geswertz werch gnippinc oder har vnder wolle gemischet daz sol man brennen fver valsch vnd pezzern mit zwain pfunden Geswertz garn swa man daz in dev tvoch wuerket der gibt zwai pfunt haller ze pvoze vnd dev	MHG	means	
62	avf gnade der schol haben daz selbe reht daz der gedingt kneht hat Swelch bvrger den andern mit verdahten mvot mit samenvnge **mit** stecken oder mit stain oder mit dehainer slahte wer missehandelt . so sol der da ist hauptman ze	MHG	means	
63	daz selbe reht daz der gedingt kneht hat Swelch bvrger den andern mit verdahten mvot mit samenvnge mit stecken oder mit stain oder **mit** dehainer slahte wer missehandelt . so sol der da ist hauptman ze pezzervnge geben cehen pfunt .	MHG	means	
64	mit dehainer slahte wer iagt ; der mvoz geben zwai / pfunt haller Swer den andern an den Rat missehan=delt **mit** worten freveleiche der mvoz geben fvnf pfvnt . den rihter daz aine . vnd der Stat dev vierev . vnd	MHG	means	

MEANS	Example	Language	Frame 1	Frame 2
65	zvo . pessern dem der da missehan=delt wirt nach der bvrger gnaden . wer aber ob er sich dez ent=slvege mit seinen aide daz er es niht frevelich hete getan vnd ane geverde . so were er niht besservnge schuldic Ven	MHG	means	
66	geschiht . ist danne ob sich zwene oder drei oder wie maniger der ist . sich zvo ainander verstrickent **mit** aiden mit gelvebden oder mit kainer laie verspruechnvesse daz si den criek niht wellen lazen ane ainander verrihten oder	MHG	means	
67	ist danne ob sich zwene oder drei oder wie maniger der ist . sich zvo ainander verstrickent mit aiden **mit** gelvebden oder mit kainer laie verspruechnvesse daz si den criek niht wellen lazen ane ainander verrihten oder niht frides	MHG	means	
68	sich zwene oder drei oder wie maniger der ist . sich zvo ainander verstrickent mit aiden mit gelvebden oder **mit** kainer laie verspruechnvesse daz si den criek niht wellen lazen ane ainander verrihten oder niht frides ane ainander	MHG	means	
69	Swer aber den wirt od^{s} ſein wirtein oder ain ir kint haimsuocht daz er die vebele handelt in ir hause mit rovfenne oder mit schlahenne oder **mit** verwnden der gibt fvenfzic pfunt haller ze pvoze Swer aber den wirt haimsucht daz er in iaget in sein haus	MHG	means	
70	ſo ſnydet her sy czuhant abe wen sy ist rife . do sprach her weme gliche were daz riche gotes . adir myt welcheme glichnysse . alse daz gute corn gesehet wirt so wechset iz . vnde wirt groz . vnde gewynnet groze	MHG	?means	
71	vnde wirt groz . vnde gewynnet groze bletere uffe daz . daz sich dy vogele dor vndir mugen beschetegen vnde myt alsulcheme glichnysse . larte vnse herre sine iungeren . wene ane glichnisse larte her sy nicht Matheus In der czit	MHG	means	
72	vnd vnser missetat . vnd ime dinen mt allen vli=ze . den sule wir ovch habn zv un=sern ebenxp̄n **mt** warheit vnd mt xp̄nlicher truowe . Behalde wir den guten willen biz an vnsern tot . so wirt vns der	MHG	means	

MEANS	Example	Language	Frame 1	Frame 2
73	. vnd ime dinen mt allen vli=ze . den sule wir ovch habn zv un=sern ebenxp̄n mt warheit vnd **mt** xp̄nlicher truowe . Behalde wir den guten willen biz an vnsern tot . so wirt vns der ware vriede .	MHG	means	
74	vil lange . Die heiligen luote die sin vil lange gewuonschit hatten da zv der helle . die loste er mt siner gewalt . vnd vur wider zv me grabe vnd erstunt do wart got vnd war mensche . Des selbin	MHG	means	
75	uwir vnd min Mit wernder stete daz ir Gote nach einis herzin gir Zu me hoisten gote hat irkorn Vnd **mit** geluobede im gesworn Sichirheit . sie sprachin ia Des si wir gotis gezuge sa Daz wir z immir stete han	MHG	means	
76	in minnen liez Ein kuonic fenix ir uatir hiez Dem wart sie do genuomen Man sach di uon crite kumen Mit eime schiffe ubir mer Di mamen sie da ane wer Xanckus gewan sie sint widir Vnd vurten s zu lande	MHG	means	
77	bielde miner selen da ane liet du hoiste selicheit da mit siner genaden wider gemachit werde dat naturliche bielde dat **mit** der sunden virdilijt is noch lengede des guoden levenis noch gebeth noch manichveldicheit der werke vireinichit dich zuo Gode mer	MHG	means	agentive
78	anderswa . da man ein gemachet spitail wolte geuin deme hus . mit sime gelte . da mohte der landescomeduer **mit** deme raite der wizegestin bruodre . dat niman . oder lazen . In anderen huseren disses ordenes . di ane	MHG	means	cause
79	so groz chost zuo den siechen ge=horet . so mach man . uan der uerlihunge der priuileigin des ordenes . mit sunder=licheme urloue des meisteres . oue des lant=comdures . bittere der almvosen . den siechen . uiz senden die geistliches	MHG	means	cause
80	dat ir zu susgetan dieneste . wiues namen . zuo hal=phenswesteren enphaet . dei seluen sal man dovch nith wan mit des lantcomndures urlovue enphaen . unde so si enphangen sint . so sal man in . uzwendech der wonun=gen der	MHG	means	cause

MEANS	Example	Language	Frame 1	Frame 2
81	. sal inchein bruoder . uzwendech des huses ezzen . it en si danne underwilen . uan sunderlicheme urlovue . **mit** ꝑlaten . oue mit geistlichen lueten trinken muogen si douch mit den seluen . Ist dat zwene bruodere . oue	MHG	means	cause
82	. unde sal doch dat selue lihen miden . so hei mit fuogen mach . it en si danne . **mit** urlouve . des meisters . oue des lantcomndures . Inchein bruoder sal riden selue ander uf eime pherde .	MHG	means	cause
83	Swer aber den wirt oder sein wirtein oder ain ir kint haimsuocht daz er die vebele handelt in ir hause **mit** rovfenne oder mit schlahenne oder mit verwnden der gibt fvenfzic pfunt haller ze pvoze Swer aber den wirt haimsucht daz	MHG	means	concurrence
84	wirt oder sein wirtein oder ain ir kint haimsuocht daz er die vebele handelt in ir hause mit rovfenne oder **mit** schlahenne oder mit verwnden der gibt fvenfzic pfunt haller ze pvoze Swer aber den wirt haimsucht daz er in iaget	MHG	means	concurrence
85	. do waz iz im leit . vnde vloch vnd vorbrach sich . Alda vormeldete in vnser here got selbe mt eime liechte daz er=schein ober ime als die svnne . Do wart er uunden . vnd wart gewiet zv pabiste	MHG	means	instrument
86	. Vmb die des phafen gerent . unt n nieth gwinnen megen . Vmb di erslagn sint . oder begriphen mit gahem ente . Vmb die ligent in unserem frithoue . Vmb alle glovbige sele . Also die collecte sint gordinot	MHG	means	manner
87	geuolget ovh er in so uerre . daz er selbe chom uiench den sichen bi den hanten . uurt in **mit** rate uz der menige der sunten . rurt im mit dem uinger sinen munt . unt siniv oren . gab	MHG	means	togetherness
88	got kinde abe der livte in der deche der deche diner getruwent si werdent getrenchet uon genuhte huses dines un mit wazzer wolluste din getrenchest du siv . want ze dir ist brunne des lebens un in liehte dinem gesehen wir lieht	MHG	means	togetherness
89	uz der menige der sunten . rurt im mit dem uinger sinen munt . unt siniv oren . gab im **mit** der gebe sines heiligen gaistes . rehte sinne .	MHG	means	togetherness

MEANS	Example	Language	Frame 1	Frame 2
	daz er uersten unt gesprechen chunde sine heilige lere . braht			
90	wart der gahe tot gestillet . Do ge=bot sente gregorius . vber alle die werlt daz man disen tach beginge **mt** vas=tene . vnd mt cruocegange vor den gahin tot vnd vor alle not die in der xp̄nheit wre .	MHG	concurrence	means
91	sin . niwan got einem . da uon hort si ander iemes gruossal niht gerne . Die uorhte benam ir mit disen worten der heilige engel . er sprach si wrte swan=ger gebaere ein chint . daz solt ih-c geheizzen werden	MHG	means	
92	. Amen . Wochen . So ir iuch denne slafen leget . so sult ir besigelen iuer fimf sinne . mit dem heiligen cruce . E ir iuch nider leget . so sol ain swester umb gen . unt daz slafhus	MHG	means	
93	da ordene . als laze wir ouch zuo ime . die erze=te ze hauene . in disen uor genantin spita=lin mit der wiser bruodre rate . Doch sol man dat sorcueldecliche bewaren . dat in allin spi=talin . den siechen .	MHG	means	cause
94	stat hat in der ecclesien . wie lief er suele hauin rittere . un wie hei sei suele intpha=in . **mit** dem seningin in den schierme der ec=clesien . mit suonderlicheme gunste . un ouch bestetigin mit antlazin . un mit	MHG	means	concurrence
95	geuen . der da gesegenet si . mit der gewonlicher senungen . unde mit deme wihewazsere besprenget . want man **mit** deme cruce den abeit disses ordenes enphehet Wie man dei kint zuo diseme ordene sule entphain . Uvir willen ouch	MHG	means	concurrence
96	schaden nimet . dat hei des ime nith in gelde . Inchein bruoder neme inchein conmendissen ze behaltene . danne **mit** scrifthe . ovf it mach mit fuogen sin . Inchein bruoder sal samenen . oue heissen hueten uremede uihe .	MHG	means	manner
97	. Wilt du ein kluege spise machen Slahe einnen duennen teic von eyern vnd von schoenem melwe mache daz dicke mit schoenem brote vnd ribe daz schele sur epfele scharbe sie groeber denne spec vf huenre die menge dar zvo nim	MHG	means	

MEANS	Example	Language	Frame 1	Frame 2
98	ich here ere Wand dv ez alleine hast Gemachet . vnd ich din gast Zv eren den beschriben Die da **mit** strit vertriben Haben . vz pruzen lande Abgote mancher hande Mit ritterlichem swerte So lange ez do werte Daz der	MHG	means	
99	oder an dem arme oder an den avgen der sol ienen geben cehen pfvnt ze pezzervnge Vnd ob mer leme mit ainem schlage / geschiht an ainen arm oder an ainem fvoze oder an ainer hant oder an ainen pain daz	MHG	cause	means
100	sol ez auch fuer ain leme pezzern vnd allewege dem Rihter sin reht voraus . Gesche=hen aber zwo leme mit ainen schlage an baiden armen an baiden handen an baiden fvozen oder an baiden pain daz sol man auch pessern	MHG	cause	means
101	mt der selben sele als wir nv schinen . Daz er ersten solde von me tode . vnd vns alle mit siner heiligen vferstandunge solde ir=ledigen . daz hatten vil siner heiligen ꝑphen lange vor gesagt in den alden ge=ziten	MHG	cause	means
102	wirdecheit . der heiliger driualdechiet . So=wanne sie auer stent . so suelin sie . zuo deme glra patri nigen **mit** gemeinelicher neigun=gin des liues . Sie suolin ouch mit ulize huotin des . dat ieman . mit wispele oder mit	MHG	concurrence	means
103	glra patri nigen mit gemeinelicher neigun=gin des liues . Sie suolin ouch mit ulize huotin des . dat ieman . **mit** wispele oder mit stimme . un ovch mit ungehortenetin ... Der meister disses ordenes . ovue die an siner stat	MHG	instrument	means
104	up den dach tuschen primen inde tercien bi eime hair breit deme eineme nie nare dan dem andrin inde mazin mit naturlicheme sinne wie ho it hinne is zuo dem hiemele den wir sien inde wie manch der hiemele sin da	MHG	instrument	means
105	guot dat Maria hadde irkorin Suole wir zuo dieseme guode kuomen so suole wir uover allit dat kuomen dat wir mit unsen sinnen begrifen muogen inde uover alle bieldunge her zuo kuoment alse lutselief luode dat ich niet in weis of	MHG	instrument	means

MEANS	Example	Language	Frame 1	Frame 2
106	dat ein bruoder wirt geware . eines an=deren bruoderes heimelicher sunden . der sal in uridesame . unde bruoderliche . mit truwen wisen dar an . dat hei siner misse=dait . kome zuo beruwenisse . unde zuo bige=the . Is auer	MHG	manner	means
107	sich uber mich note un ih ne wesse zestoret wrden si nieht gestunget . si uersuhten mih si spoten min **mit** schalle si girscramoten uber mih mit zanden ire herre wanne sihest du ez irstate die sele min uon ubele ire	MHG	manner	means
108	sine zil Chatinus den ich han genant Vnd fenix ein stolcz wigant Von thebe vuren do mit her Vnd besazin **mit** starkir wer In einir inselin hiez zirta Von dan betwungen sie sa Thyre . vnd sydonie di lant Daz sie	MHG	togetherness	means
109	449. dissen edlen mayen fur dye thur der lyeben heylligen patryarchen , dye dissen hubschen mayen mit manicherley fugur pedeut haben vnnd der heylligen profeten , Dye grose ding von dyssem edlen	ENHG	means	
110	602. / , ja auch khain khuchgeschierr mit fueeren lassen / , Sonder hat sich menigclich **mit** geselchten fleisch benuoegen muessen / (.) So hat er sich mit seinem Satl vnder seinem	ENHG	means	
111	608. das Griechenland verwueest / (.) darueber haben die andern Griechischen Fuersten zu jme geschigkht / mit Gold vnd Panedogkhen senfften woellen / , das er aber veracht / vnd nit an,	ENHG	means	
112	613. Großneugarten gesetzt / vnd ist ain ainiger Herr der Reissen worden . (.) WOLODIMER ist mit hilff der Wareger wider khomen / , seines brueder Stathalter veriagt / vnd seinem Brueder	ENHG	means	
113	621. gesetzt / vnd die zwispalttigen / , es sey Erbschafft oder andern sachen halben / mit derselben Vrtayllen entschaiden worden (.) Vn an gesehen des / seind dennocht offt Khrieg zwischen	ENHG	means	
114	622. erwarb das großfuerstenthumb / , das der Demetrj verfangen hette / , den verjagt Andre mit hilff der Tartern . (.) Hertzog DEMETRI , des MICHAELN Sun / , hat den	ENHG	means	

MEANS	Example	Language	Frame 1	Frame 2
115	636. gewisst , one das ewigclichen also schwaerlichen gefangen sein mueesste . (.) Vnd als der mit schwaerem Ayd verpunden was / , ließ der Großfuerst den ledig / vnd jme gleichwol	ENHG	means	
116	637. / (.) Nach verloffenen siben jarn / ist er widerumb nach Neugartten gezogen / vnd mit hilff des Ertzbischoue daselbst , Theophili , in die Stat khumen / , das volck	ENHG	means	
117	740. in dem closter gueetlich vnnd saeligclich leben / , alle aembter nach alter gewonhait vnd mit bewilligen der elttern brueeder versorgn / , ainem yeclichem ambt ainen gethreuen für setzen /	ENHG	means	
118	806. . Die Apostel lehren / , das wir vns bearbeiten sollen / , vnsern beruefff mit gueten Wercken gewiß machen / , 2 . Pet . 1 . v . 10	ENHG	means	
119	836. selbst bekennet ? (?) Singen vnd halten sie nicht an gewissen Orthen die Teutsche Meß mit Gesang / , Musik vnd Orgel ? (?) Singen sie nicht ohn vnterlaß Psalmen ?	ENHG	means	
120	845. vnd wunderbarlich errettet hat ? (?) wir koendten auch , wo vonnoethen were / , **mit** Namen nennen / , welche vnder vns mit jhrem Gebett Teuffel auß getriben / oder	ENHG	means	
121	846. auch , wo vonnoethen were / , mit Namen nennen / , welche vnder vns **mit** jhrem Gebett Teuffel auß getriben / oder sonst grosse ding gethan haben: , aber wir	ENHG	means	
122	2257. ich bin nitt der / , dem du forcht ein bilden solt / , dan mit der huelff meines Herrn Jesu / wil ich den Keyser dich noch heut lebendig oder	ENHG	means	
123	2303. von seinem pferd gwan / , damit den Heyden wundet / , vnd jn zulest mit eyner toedlichen wunden vberwandt . (.) Plorantz , des Heyden schwerdt , mocht Oliuiern nit	ENHG	means	
124	2332. mir meine wunden geheilt seindt / , so will ich vndersteen / , den Cristenglauben mit allem meinem vermoegen helffen erhoehen / vnd vil Heyden sollen durch mein zuthuou zum glauben	ENHG	means	
125	2690. corpora am hymel seien / (.) vnd auß vberlegung des hymels / oder astronomia / mit	ENHG	means	

MEANS	Example	Language	Frame 1	Frame 2
	der Geometria / rechnet man gar eygentlich ab / , wie weit / , rond			
126	2694. / (.) koenten fast vil der dinge mher hie an gezeygt werden , wo ich mit meinem langen schreiben euch gern verdroeßlich sein wolt . (.) Doch werden dergleichen argument vil	ENHG	means	
127	2723. kriegten wir die oberhandt / vnd namen jnen das schiff / (.) sie entfuhren vns mit dem bote nach den insulen / (.) Das schiff hatte vil wein vnd brots /	ENHG	means	
128	2725. newen land zu faren , die sie inne haben / , Fuhr derhalben von Lissebona mit eynem Engellendischen schiffe in Castilien / bei eyne stat , Porta sancta Maria genant /	ENHG	means	
129	2731. / (.) da liessen wir den ancker zu grund gehen / , wurden sins , mit dem botte auß zu faren , den hauingen weiter zu erkunden . (.) Wie vnser	ENHG	means	
130	2732. botte auß zu faren , den hauingen weiter zu erkunden . (.) Wie vnser etliche mit dem bott fuhren , den hauingen zu besichtigen / , funden eyn Crucifix auff eyner	ENHG	means	
131	3792. Nun raſpelt hynder myr her/ eyn thor Jochet mich/ vnd raumeth myr in eyn ohr , Luther habe gestrickt gar eyn vestnetze , Wan er alle artickel **mit** der schrifft vor setze (.) Er moege mit Itzlichen davon disputyren , Den acker der	ENHG	means	
132	848. weg zu . (.) Jst dann jhr Glauben new / , so muß er entweder mit Himmlischen Zeichen bewiesen werden: oder auff daß wenigst / , daß der jhn hat gepredigt	ENHG	means	agentive
133	1999. darbey grosse Gaerten , reich von schoenen Gartengewaechsen vnd guoten früchten , die aussen herumb mit rinckmauren / , weil taeglich der Araber vberlauff gar groß / , zimlich verwaret .	ENHG	means	instrument
134	486. da er aus czarter , kintlicher lieb czw got , seinem hymelischen vatter , rueft senlych **mit** lauter stym vnd mit genaigtem , duemuettigem haubt (:) () vatter , in dein hendt	ENHG	means	manner

MEANS	Example	Language	Frame 1	Frame 2
135	446. der im von ewigkayt fur gesoczt hat czu leyden fur dye creatur , dye er mit seiner allmechtigkayt geschafen hat , das er dych auch genedigklich an nem in dem wollgefallen	ENHG	means	
136	485. leyden , das wyr verdienen (.) wen wyr wyssen , das vns vnsser allerlyebster herr mit seinem leczten wordt so getreulich in dye hendt des hymelischen vatters pefolchen hat (.) dye	ENHG	means	
137	612. vnnd aus desselben Hiernschallen ein Tringkhgefaeß gemacht / , mit Gold beschlagen / , vnd **mit** puechstaben darein setzen lassen dise maynung . (:) Frembdes suechend hat das seine verlorn .	ENHG	means	
138	623. begert / (.) der wolte ein Tribut entgegen haben / , aber seine Raethe waren mit gaben bewegt / (.) die erbatten / , das der Tribut nach gelassen ward .	ENHG	means	
139	737. jre geschichtschreiber . (.) Vor zeittn warden die Metropoliten , auch die Ertzbischoffe , erwelt mit versamlung der Ertzbischoffen / , Bischouen / , Abbten / vnnd Priorn der Cloester /	ENHG	means	
140	2409. / , er setzet in das wasser dem weissen Hirsch nach / , zeychnet sich **mit** dem heyligen Creutz / vnd stettigs was in seinem hertzen der nam Gotes / mit	ENHG	means	
141	442. den lustlichen spyegelein der manigfalltigen aygenschaft dys freud geveten mayen Do Grues dissen holltselligen mayen mit dem helligen sannck andreas , des augen auch erstart warn in dissen heylligen creucz ,	ENHG	means	concurrence
142	522. herczen gehabt hat , sind wyr all geystlych lebentig worden (.) wan der herr hat **mit** seinem heylligen tod / den tod getod vnd vns mit seinem sterben das ewig leben verdyent	ENHG	means	
143	561. ist ein schein des hymelyschen vatters , der rainigt dye gancz wellt von jren sunden mit dem wasen des heylligen sperr (.) darvmb wyr dys edel ystramendt vnsser erlosung , das	ENHG	means	

MEANS	Example	Language	Frame 1	Frame 2
144	812. daß ſich Reich vnd Arm Edl vnd Vn= edl herfůr thue vnd die Ehr GOttes be= fůrdere auff alle weeg vnd weiß / , mit strengem bueßfertigen vnd heyligen Leben / , **mit** Predigen vnd Buecherschreiben . (.) Weiln aber bey den NewEvangelischen gar keiner auß hohem Geschlecht	ENHG	means	
145	2304. seins manlichen gemuets / , das er seines schwerd nit wolt / , sunder es **mit** rechtem streit gewinen . (.) Es kam der Heyd mit seinem schwerd Plorantz zuo Oliuiern	ENHG	means	
146	2711. von Gott gesant , in noeten zu troesten . (.) Theten Gott eyne dancksagung darfuer mit eynem gemeynen gebet / (.) Darnach verschwunden sie wider . (.) Vnd dise liechter heyssen	ENHG	means	
147	2721. / , meynten es zu nemen / (.) aber sie verderbten vns den grossen mastbaum mit eynem schosse / vnd entsiegelten vns / (.) etliche vnsers schiffes wurden erschossen / ,	ENHG	means	
148	811. herfuer thue / vnd die Ehr GOttes befuerdere auff alle weeg vnd weiß / , **mit** strengem bueßfertigen vnd heyligen Leben / , mit Predigen vnd Buecherschreiben . (.) Weiln aber	ENHG	means	manner
149	2285. wolt es nit thuon / , ob er doch darunb sterben solt / , dan mit freiem streit wolt er jn erobern / (.) sie ranten wider zuohauff / vnd Oliuier	ENHG	means	
150	839. / , sondern bestaettigen dieselbe . Wie dann Christus seine Wort vnnd Predigen gemeinlich pflegte mit Wunderwercken zu bekraefftigen / , als die Predig / , die er im Schiff gehalten	ENHG	means	
151	1202. die ternitat{3} ano . xlviiijc . kam hertzog albrecht in geritten gon Rinfelden , wart mit dem heltuom erlichen enpfange{6} , es was aber nutz in der stat , muost Ritten	ENHG	means	agentive
152	810. Person . (.) Censur . (:) Diß waiß man alles wol: (.) es wird aber mit diesem Gschwaetz auff den Einwurff nit geantwortet . (.) Dises ist / , was man	ENHG	means	

MEANS	Example	Language	Frame 1	Frame 2
153	673. seiner haußfrauen Vatters bruoder ware / , dem wolt er seine khinder beuoelhen / derselb mit seiner schickligkhait vnnd manhait wurde die khinder seine fründt / wissen vnd mügen bey der	ENHG	attribute	means
154	496. er in disem leczten wort lieblich vnd freuntlich , alle , dye er erlost het mit seinem kospern plut , dye sunst an sein entpfalchung ewigklych heten muesen von got verstosen	ENHG	instrument	means
155	680. , ainen Khuenig zue erhoehen deinnen heilligen voelgkhern / , welche du erloeßt hast / **mit** deinem khostparlichen bluoet deines ainigen Suns / (.) Besalb den mit dem oel der freyden	ENHG	instrument	means
156	682. ainigen Suns / (.) Besalb den mit dem oel der freyden / , beschütz den **mit** der crafft des hoechsten / , setz auff sein Haubt die Cron von Edlem gestain	ENHG	instrument	means
157	445. durch alle chor der heylligen englen vnd lyeben heylligen des hymelischen vatterlandts , vnd das sy dyr mit schallen in dissem spacieren halfen singen das vinigklych lyedlein (.) es mues sein , das	ENHG	manner	means
158	639. offt gesagt / , Moscouither erweittert sein Land anhaims sitzend / (.) Er aber müge mit grosser seiner müehe vnnd arbait sein Land khaum erhalten . (.) Der Großfuerst Hans hat	ENHG	manner	means
159	690. guete vnnd rainigkhait leben / (.) () das was etwas stiller gesprochen / , Aber mit lauter stimb / (:) () du bist der Khünig der welt vnd erhalt er vnnser	ENHG	manner	means
160	2429. vnder jme Zehen Tausent Heyden / (.) darumb so weiß ich / , das vnns mit gewalt durch zu ziehen vnmueglich / , wann sie forechten keynerley Sturm / (.) vnd	ENHG	manner	means
161	2717. vfers / , meynten vns die reyse zu uerhindern / (.) Wir zerbrochen dasselbige wider mit gewalt / (.) es wurd eben mitlerzeit / (.) Wir blieben auff dem truckenen .	ENHG	manner	means
162	3816. / , das von Christo keyn oeberkeyt sey auff gericht in der kyrchen / , mit gwalt tzeuget vnd beuget / , drynget / , tzwinget / , tzerret vnd dennet	ENHG	manner	means

MEANS	Example	Language	Frame 1	Frame 2
163	615. Volodimer den Rochuolochda bekhriegt / vnd den mit zwayen Suenen erschlagen / vnd die Rochmida **mit** gwalt genommen / , nachmals wider seinen brueder gen KHIOW geruckht / (.) Jaropolkh aber	ENHG	manner	means
164	619. seiner Praut im 1383 . Jar . (.) SWATOPOLCH , der das Fuerstenthumb zu Khiow mit gwalt vber khummen / , hat Leut verordent / , die seine zwen Brueder Boris	ENHG	manner	means
165	659. nit ainn man verloren / (.) Er vber traeff alle Khuenig / vnd Fuersten / mit dem gewalt / , den er hette vnd gebraucht vber die seinigen / vnd das	ENHG	manner	means
166	686. der selben . (.) Vnd damit erlanng darnach das Himlisch Reich . (.) () Nachmals mit lautter stimb spricht er / (:) () Alsda ist dein Macht / vnnd ist dein	ENHG	manner	means
167	809. vnd gehorſamb vnder ainem Obern ſich verlobe vnd folge; , welche doch Christus seiner Kirchen / , als ein Edles Klainod / , mit so stattlichen Lob vnd Verhaissung gerathen vnd commendirt . Darauß nit vbel zu schliessen /	ENHG	manner	means
168	825. / , als wann die Stein abwerths fallen . (.) So hat man disem Gifft mit der Gnad Gottes den Weeg baldt verrennt / , daß es sich nit weitter auß	ENHG	manner	means
169	625. dein vrthail geben / (.) Nun aber hab ich deine brieff / , die du mit deinem gulden Sigil beuestnet hast / , das du mich woellest in das Großfuerstenthumb ein	ENHG	material	means
170	557. seiten xpin , so hat er hin genumen dye vinsternus vnsser gemuete vnd hat gerainigt mit flus der gotlychen mylltigkayt (.) da der ryter longinus sein allerscherpfeste lanczen erschut hat ,	ENHG	material	means
171	813. . , vom Antichrist geschrieben / , daß er werde seinen Gott Mauzzim ehren / mit Gold / , Silber vnd Edelgestein / , vnd seine Diener zu grossen Herren machen	ENHG	provision	means
172	Wladimir, den sie mit Direktor anredet, erklärt ihr auf russisch die Sachlage.	NHG	means	

MEANS	Example	Language	Frame 1	Frame 2
173	Die Arbeit der sogenannten Quacksalber des Mittelalters, die in "Grimms Märchen" so schön mit "Doktor Allwissend" beschrieben wird, war nicht Heilmethode auf medizinischer, sondern einzig und allein auf suggestiver Basis.	NHG	means	
174	Es war nicht nur die alberne Ausgelassenheit aller Frauen in Papenbrocks Haus, die die Männer an die Wand drücken wollten mit der Geburt (» Mein Mann ist im Krankenhaus.	NHG	means	
175	Am 2. Juni erklärte das Mitglied des sudanesischen Staatsrates Paci fico Lado LOLIK zum Abschluß eines dreitägigen Besuches in Uganda, das sudanesische Volk habe beschlossen, die inneren Probleme mit friedlichen Mitteln zu lösen.	NHG	means	
176	Mit zwei Büchern hat er bisher seine Begabung fürs Skurrile, Kauzige, Versponnene dokumentiert.	NHG	means	
177	Die zweite Alternative, mit der sich zu beschäftigen die Sowjets uns gezwungen haben, ist die Möglichkeit eines Krieges.	NHG	means	
178	Oder mit einem Wort: zu verstehn ist das Ganze nur - als eine Einheit, als ein plötzlicher Aufruhr der Geister und Seelen, und eine Umwälzung - nicht anders als die Eruptionen der Natur - die nun weiter dauert, weiter rollt, kein Ende nimmt, nein, um sich greift, Alles verschlingend, die Gemüter, die Gefühle, die Ideen, die Anschauungen - na, Alles das wird vollkommen gleichgültig, sinnlos, die Sturmflut rast dahin, und Alles wird verschlungen.«	NHG	means	
179	Unser lieber Herr Buchführer und Drucker aber/ wann man Ihm de solvendo saget/ wird seine unzehlbare Geschäffte vorschützen/ hat er dann einen Diener oder Sohn/ der dem Handel im Namen seines Principalen und Vaters vorstehet/ an statt deß Geldes sollen sie mit unnützen Worten zahlen.	NHG	means	
180	Das den jüdischen Mitbürgern zugefügte Leid könne mit dieser finanziellen Leistung zwar nicht ungeschehen gemacht werden, solle aber zumindest eine symbolische Wiedergutmachung bewirken.	NHG	means	

MEANS	Example	Language	Frame 1	Frame 2
181	Angenommen, der untersuchende Offizier läßt sich vom Kapitän die Papiere irgendeines Mannes geben und stellt an diesen dann persönlich allerlei Fragen über das Aussehen seines Heimatortes, wie die größeren Nachbarorte heißen, welche Bahnverbindungen bestehen, wie der Bürgermeister oder Ortsvorsteher heißt, wo sein Bruder, Onkel oder Tante wohnt, auf welchem Schiff er vor drei Jahren war, welche Reise er mit diesem Schiff gemacht hat, oder er läßt sich einen Brief von seinen Angehörigen aus der Zeit geben:	NHG	means	
182	Während der Zehnjahrperiode können die Abmachungen oder der Vertrag nur mit Zustimmung beider Parteien und der Vollversammlung geändert werden.	NHG	means	
183	Daß dieser Mann mit seinem jüdischen Anhang seit Jahren **mit** den gleichen Mitteln gegen Japan kämpft, ist uns bekannt.	NHG	means	
184	So befaßt sich Nikita Kolpinski **mit** dem Thema "Lenin über Friedrich Engels als einen der Begründer des wissenschaftlichen Kommunismus", Waleria Kunina mit "Friedrich Engels im Kampf für eine proletarische Partei in Großbritannien (1871-1881)", Boris Tartakowski mit "Friedrich Engels' Beitrag zum ideologischen Sieg des Marxismus in der internationalen sozialistischen Bewegung (1875-1895)"; Lew Golman schrieb den Aufsatz "Friedrich Engels - Kritiker der bürgerlichen Historiographie" und Walentina Smirnowa "Engels' Kritik an den Auffassungen Proudhons und sein Kampf gegen den Proudhonismus in der internationalen Arbeiterbewegung".	NHG	means	
185	Modern ist es auch, den Brief **mit** neuen Formen zu beginnen, wie »Guten Tag« oder, wenn man den romanischen Sprachraum bewandert und mit den dortigen Usancen vertraut ist, mit der Anrede »Salut«.	NHG	means	

MEANS	Example	Language	Frame 1	Frame 2
186	Der Erfolg dieser Klientel-Partei, die nach kontinuierlichem Zuwachs mittlerweile zehn Mandate in der 120köpfigen Knesset hält, beruht auf einem Rezept, das auch von den Fundamentalisten-Parteien in der arabischen Welt angewandt wird: Sie dient sich den meist sozial schwachen Einwanderern mit Schulen und vielfältigen Hilfsprojekten an.	NHG	means	
187	Die Ackerschnecke meidet Sonnenschein, am Tage sucht sie dunkle und kühle Schlupfwinkel auf, ruht auch zwischen Erdschollen aus oder sie begnügt sich mit einem Versteck an der Unterseite des Blattes.	NHG	means	
188	Eine »Bürgerrechtsinitiative« bildete sich in Riesa, als auf Veranlassung eines dortigen Arztes, Karl- Heinz Nitschke, am 10.7.1976 zunächst 33 Bürger eine »Petition zur vollen Erlangung der Menschenrechte« mit Namen und Anschrift unterzeichneten, die sie sowohl dem Staatsrat der DDR wie auch westlichen Medien zur Veröffentlichung zuleiteten; etwa weitere drei Dutzend Bürger aus Riesa, Karl-Marx- Stadt und Umgebung schlossen sich dieser Aktion später an.	NHG	means	
189	Das männliche Bedienungspersonal wird in einer Gaststätte immer mit »Herr Ober« angesprochen, ganz gleich, ob es sich um einen Kellner oder um einen Oberkellner handelt.	NHG	means	
190	Es heißt, die neuen Gäste würden von den alten am Juister Bahnhof mit dem Ruf begrüßt:	NHG	means	
191	Sind die zum Teil plastischen Themen und die Art ihrer Verarbeitung auch nicht die Kundgebungen einer besonders starken und originalen Schöpferkraft, fehlt es auch hier und da ein wenig an Schwung und sinnlicher Wärme, so muß doch anerkannt werden, daß wir es mit der Arbeit eines keineswegs alltäglichen Kopfes zu tun haben.	NHG	means	
192	Wer diesen Saal fluchtartig verlässt, der kann mit dem Schlagwort "Marxismus" nicht die Tatsache verschleiern, dass er in den schwersten und bittersten Jahren des deutschen Volkes sich abseits gestellt hat,	NHG	means	

MEANS	Example	Language	Frame 1	Frame 2
	während grosse Arbeitermassen den Mut aufgebracht haben, die Politik der Verantwortung mitzumachen.			
193	Und ich werde mich dann natürlich nicht mit einer Ohrfeige begnügen, sondern rechts und links schlagen, bis dir die Backen anschwellen.	NHG	means	agentive
194	Es wurde ziemlich finster, wir hatten keinen Mond und mußten uns mit dem Sternenlicht begnügen.	NHG	means	agentive
195	Zum Präsidenten der Vollversammlung wurde mit den Summen von 58 Delegationen der indische Vizepräsident Dr. Sarvepalli Radhakrishnan gewählt.	NHG	means	cause
196	Weil das Großhirn sich erst vor kurzem entwickelt hat und anatomisch recht homogen gebaut ist, nur wenige Zelltypen enthält und mit standardmäßigen Verbindungsmustern auskommt, ist es vielleicht leichter zu verstehen als ältere, stärker optimierte Teile des Nervensystems.	NHG	means	cause
197	-- Eine Resolution 3520 (XXX) vom 15. Dezember 1975, die mit 10 gegen 1 Stimme (Israel) bei 26 Enthaltungen (darunter die meisten westlichen und lateinamerikanischen Staaten) angenommen wurde und die Weltkonferenz des internationalen Frauenjahrs betrifft (19558 A); es wird von den Beschlüssen von Mexico Kenntnis genommen und der Zeitraum 1976 bis 1985 zum UN-Jahrzehnt für Frauen proklamiert.	NHG	means	cause
198	Ihre Delegierung nach Düsseldorf, die Erteilung des Visums für die Westreise hatte man von oberster Stelle als Vorwand benutzt, um den Offizier und Genossen Willi Meerbusch zu zwingen, Auskunft über die Herkunft von einhunderttausend DM zu geben, mit denen er seine Koproduktion der Kölner Laoze-Film-Gruppe finanziert hatte.	NHG	means	instrument
199	Zu trocken war es - sehr wahr, werden die Freunde eines guten Tropfens mit ernstem Kopfnicken bestätigen, und die Wasser- und	NHG	means	

MEANS	Example	Language	Frame 1	Frame 2
	Wasserkraft-Wirtschaftler bemerkten es schon mit Sorgen.			
200	Sie sotten in einem glutheißen Sand, darin sie lagen, dünn beschattet von dem Gelaub der Zweige, sie rupften liegend, **mit** kleinen kurzen Bewegungen wie Ziegen mit ihren Lippen die vollen Trauben der Johannisbeere von den zerbrechlichen Stengeln.	NHG	means	
201	Aber mit welcher Berechtigung?	NHG	means	
202	Gibt man jetzt die Menge der Endprodukte [Formel] vor, die mit jedem möglichen effizienten Produktionsverfahren produziert werden soll, sowie die Intensitäten d1, ..., dr, so ist der Faktorverbrauch hierfür festgelegt.	NHG	means	
203	Mit welcher Methode geht er vor?	NHG	means	
204	Aber als schon das erste Zeichen zur Abfahrt des Zuges gegeben war, als die Schaffner die letzten Fahrgäste, die in der Hoffnung, doch noch ein weniger besetztes Abteil zu finden, von Wagen zu Wagen jagten, **mit** drängenden Rufen zum Einsteigen mahnten, hatte sie mit einemmal das sichere Gefühl, daß jemand sie starr und fest ansah.	NHG	means	
205	Man wollte bemerkt haben, daß die Prinzessin eine saure Miene machte und die Begrüßung des Bräutigams nur mit einem scharfen Kopfnicken erwiderte.	NHG	means	manner
206	Mit schleppender Stimme, sonst aber ohne ersichtliche Beschwerden, startete Breschnew dabei eine Friedensoffensive, an der nun auch sein Leibarzt aktiv teilnimmt.	NHG	means	manner
207	Vom 1. Juli an wurden überall Sturmstellungen angelegt, schmale Gräben, 100 Meter vom Feinde ab, in denen wir uns mit Leitern und Handgranaten bereitstellten.	NHG	accessory	means
208	Unbemerkt von der Öffentlichkeit begann das Gauschulungsamt Berlin 1936 mit der Einrichtung der "Fliegenden Gauschule.	NHG	concurrence	means
209	Während dieser Zeit bekommt der Kranke Medikamente, mit denen die Entzugserscheinungen gedämpft und die	NHG	instrument	means

MEANS	Example	Language	Frame 1	Frame 2
	körperlichen Alkoholfolgeschäden (Frage 15) behandelt werden können.			
210	Seine Worte, die, während er Antwort gab und auch späterhin, aus der Finsternis drangen, schienen in ihrem Tonfall ein Lächeln zu enthalten, das ihn unvergleichlich viel deutlicher machte als der geistesgegenwärtige Zugriff, mit dem er sich eingeführt hatte.	NHG	manner	means
211	Geht es aber darum, das Bildungsgesetz **mit** minimalem Transformationsaufwand zu formulieren, so ist das mit den beiden Elementetripeln formulierte Erzeugendensystem die optimale Lösung.	NHG	manner	means

OPPOSITION	Example	Language	Frame 1	Frame 2
1	wettu irmingot quad hiltibraht obana ab heuane dat du neo dana halt mit sus sippan man dinc ni gileitos · want her do	OHG	opposition	
2	uuanga , garauui imo thaz ander . Inti themo uuolle mit thir in stríte bagen inti thina tunichun neman , fúrlaz	OHG	opposition	
3	stark mechtic sach Kere in unsir teil zu mir Vnd hilf mir ich helfe dir Daz wir an disen geziten Mit chananeo ouch striten Den uil creftigin heidin Von den geslechtin beidin Wart ein sicherheit getan Wisliche giengin sie z an	MHG	opposition	
4	823. den Papisten / (.) wir hoffen auch , wann es Gott will / , vns **mit** jhnen viel eher zu vergleichen / als mit dem Bapsthum: (.) Dann sie geben der	ENHG	opposition	
5	1125. obeis Iten ano dnin .xlviii. cerca festun galli Hatt Hertzog olbrecht von oesterich ein span mit den von colmar von erberlin des Juden wegen wolt er von jnnen han der wart	ENHG	opposition	
6	1126. er von jnnen han der wart jm verseit zugend uff Herczog ludwig Reit gilge kempff mit dem Juden gen Heidelberg dozwischend det der Herczog den Juden in ocht vnd wer in	ENHG	opposition	
7	1969. angesicht zum dritten mal gefallen vn seinen himlischen Vatter gebetten / , alda er auch mit dem tod gerungen / , bluotigen schwaiß geschwitzet / , dz auch endlich von himel	ENHG	opposition	
8	2252. muehe moegen erschlagen / , aber er halff jm trewlich sich zu wapnen / , mit jm zu streitten / (.) grosse tugent moecht man hierumb an diesen beyden sehen vnnd	ENHG	opposition	
9	2276. hett er dich inn eyn weiß leilach gelegt / , were dir senffter vnd besser / , dan mit mir zu streitten gewesen . (.) () Diß erhoret Oliuier gantz erfuelt mit hefftigem zorn	ENHG	opposition	
10	Zu einem großen Braten können Sie einen roten Bordeaux aus Médoc, Saint-Emilion, Pomerol und Graves, einen Burgunder der Côte d'Or servieren oder einen der deutschen Rotweine von der Ahr oder aus Aßmannshausen, die mit den Burgunderlagen der Côte d'Or in sehr guten Jahren durchaus konkurrieren können.	NHG	opposition	

OPPOSITION	Example	Language	Frame 1	Frame 2
11	An dem verkleinerten, schwankenden Boot des Militärstaates hängen Hunderte, Tausende, Zehntausende zweifelhafter Existenzen, die, zu faul und zu feige und auch wohl zu unfähig, im bürgerlichen Leben den Kampf mit dem Dasein aufzunehmen, den Staat in räuberischer Weise belasten.	NHG	opposition	
12	Und wir können endlich den Grad der Begünstigung eines bestimmten Erfolges durch bestimmte »Bedingungen« zwar in durchaus keiner Weise eindeutig oder etwa gar nach Art einer Wahrscheinlichkeitsrechnung abschätzen, - wohl aber können wir, durch den Vergleich mit der Art, in welchem andere, abgeändert gedachte Bedingungen ihn »begünstigt« haben »würden«, den relativen »Grad« jener generellen Begünstigung einschätzen, und wenn wir diesen Vergleich in der »Phantasie« durch hinreichend viele denkbare Abänderungen der Konstellationen durchführen, dann ist ein immerhin erhebliches Maß von Bestimmtheit für ein Urteil über den »Grad« der objektiven Möglichkeit wenigstens prinzipiell - und diese Frage allein beschäftigt uns hier zunächst - denkbar.	NHG	opposition	
13	das Verbot zu vergessen, **mit** einer Gesellschaft völlig zu brechen, die es aufstellte, und fernab von ihr mit seiner Muttergeliebten zusammenzuleben: eine nicht nur psychotische, sondern auch mehr als romantische Idee.	NHG	opposition	
14	Dieser hat im Widerspruch mit allen anderen Zeugen sogar im Innern des Heidemannschen Hauses Feuer gesehen.	NHG	opposition	
15	Ich kramte mein Reifezeugnis hervor und verglich es mit dem Bildungsbesitz eines Magistratssekretärs, der in den Aufsätzen seiner Verbandszeitschrift die Probleme der Welt erörtert fand.	NHG	opposition	
16	Zu gleicher Zeit schwangen die Indios, die den Montezuma umgaben, ihre Waffen und begehrten mit viel Geschrei, **mit** den Spaniern handgemein zu werden.	NHG	opposition	

OPPOSITION	Example	Language	Frame 1	Frame 2
17	Den kolonialen Weg, wo einer an alle Dinge und alle Menschen gerät und, wenn er mehr ist als ein Stubenvogel, auch den Zusammenhang und die Auseinandersetzung mit der noch ungebändigten und urwüchsigen Natur notwendig erlebt, konnte Grimm in der Heimat kein zweites Mal gehen.	NHG	opposition	connection

PARTITIVE	Example	Language	Frame 1	Frame 2
1	. Swanne uerscaidet ain bruoder . oder ain swester . alder z ainer iarcit . so sprih dise uigilie . mit den langen leccen . Salm unt antifn . suoch der nah . Oder den . Da nah sinc die uesp	MHG	attribute	partitive
2	1207. alban in den kilchoff , das vnsaglichen ist c (.) domitte kam ein samlich hagelwetter **mit** schiblechten steine{6} , ein teil als huerneyer , ein teil mit antlidren , nam alles	ENHG	attribute	partitive
3	2710. gar keyn windt etliche tage / , dann in der nacht kamen offtmals grosse donnerwetter mit regen vnnd windt / , erhuoben sich bald / , vergiengen auch bald / (.)	ENHG	attribute	partitive
4	Die Kap-Mischlinge haben zwar, ähnlich wie die Inder in Durban, begrenzte Selbstverwaltungsrechte, **mit** eigenen Schulen, auch mit einer kleinen Universität, müssen aber in bestimmten Stadtvierteln leben und dürfen sich nicht mit Weißen verbinden.	NHG	partitive	
5	Bei ihr sind bisher 6 Divisionen, die in 3 Korps gegliedert sind, und zwar am Ostflügel das I. Korps (General Santini) **mit** den Heeresdivisionen 19 und 30 bei Adigrat, dann das Eingeborenenkorps (General Biroli) mit 2 Askari-Divisionen und am Westflügel das II. Korps (General Moravigna) mit 2 Heeresdivisionen bei Adua.	NHG	partitive	
6	Maßnahmen traten am 1.6.1984 in Kraft: u.a. Verlängerung des bezahlten Babyjahrs auf 18 Monate vom 3. Kind an; bezahlte Freistellung zur Pflege erkrankter Kinder; vorrangige Versorgung mit größeren Wohnungen.	NHG	partitive	
7	im Norden und Nordwesten drangen die Heere in die Steppen vor, im Süden wurden südlich von Ch'u neue Kommanderien errichtet, drei zum Beispiel 214 v. Chr. im südchinesischen Binnenland - mit Teilen der heutigen Provinz Hunan, Kuangtung und Kuangsi und wohl auch einschließlich des Nordens des neuzeitlichen Viet-Minh-Staates.	NHG	partitive	

POSSESSION	Example	Language	Frame 1	Frame 2
1	Inti árgieng sín liumunt in alla Syria , inti bráhtun imo alle ubil habante inti mít messalihhen suhtin inti mit uuizziu bifangane , inti thie thár habetun diuual , inti	OHG	possession	affliction
2	sol man wizzen daz ein icleich burger . vmb alle missetat . do er vmb angesprochen wirt vnd vmb inziht mit sein ainer hant enbresten mag . ane vmb totslege plutrunst vnd vmb heimsuch Es habent gesetzet di burger von Rat	MHG	possession	
3	Ist es auf unbestimmte Zeit eingegangen, so endigt es durch Kündigung und Ablauf der Kündigungsfrist: im allgemeinen können beide Teile mit sechs Wochen Frist auf den Schluß des Kalendervierteljahres kündigen, doch kann auch eine beliebige andere Kündigungsfrist vereinbart werden (HGB. 92).	NHG	possession	
4	Er kam mit dem Leben davon, büßte aber die Sehkraft auf dem rechten Auge ein.	NHG	possession	
5	Mit rund 1,9 Millionen Kunden liegt man weit vor der Konkurrenz.	NHG	possession	cause
6	Mit Haß auf Franz ist sie gestorben, seine Stinkwut auf sie hat auch nach ihrem Tod nicht nachgelassen, ihr neuer Freund, der Breslauer, hat sie noch besucht.	NHG	possession	concurrence
7	Der mit der Teetasse ergriff das Wort.	NHG	accessory	possession

PROVISION	Example	Language	Frame 1	Frame 2
1	, der burge tiure liehtfaz . Diu burg ist gestiftet mit aller tiuride meist ediler geistgimmon , der himelmeregriezzon . der	OHG	provision	
2	Ir sizzet in thera burgi , unz ir sit giuuatite mit megine fon hóhi . Tho leita hér sie úz in	OHG	provision	accessory
3	da gegenwortihc is . ovfe der prister . den manteil mit deme cruce geuen . der da gesegenet si . **mit** der gewonlicher senungen . unde mit deme wihewazsere besprenget . want man mit deme cruce den abeit disses ordenes enphehet	MHG	provision	
4	661. . (.) Die Potschafften / , so zu Khaiser vnnd Khuenigen geschigkht / vnd dieselben mit khetten / , Tringkhgeschieren vnnd annderm verehrt worden / , das naeme der Fuerst alles	ENHG	provision	
5	664. die zwen ſeind in Hiſpanien zu Khaiſer Caroln dem fünfften geſchigkht vnnd da= ſelbſtn **mit** anſehlichen khetten Hiſpaniſchen Toppl gůlden darnach auch von des Khaisers brueder Ertzhertzog . Ferdinanden , meinem herrn / , mit silbren vergueltten Khoepfen / , auch gülden vnd silbren stugkhen / , Osterreichischer silbrer vnd gueldener müntz begabt vnnd verehrt worden	ENHG	provision	
6	daſelbſtn mit anſehlichen khetten Hiſpaniſchen Topplgůlden darnach auch von des Khaisers brueder Ertzhertzog Ferdinanden, meinem herrn / **mit** silbren vergueltten Khoepfen / auch gülden vnd silbren stugkhen / Osterreichischer silbrer vnd gueldener müntz begabt vnnd verehrt worden.	ENHG	provision	
7	813. . , vom Antichrist geschrieben / , daß er werde seinen Gott Mauzzim ehren / mit Gold / , Silber vnd Edelgestein / , vnd seine Diener zu grossen Herren machen	ENHG	provision	means
8	Um dieses Wort wenigstens mit einer deutschen Übersetzung zu versehen, erinnern wir uns daran, daß das griechische »mächanan« bedeutet: künstlich verfertigen, nach Berechnung verfertigen, so machen, daß etwas vorausgesagt werden kann.	NHG	provision	

PROVISION	Example	Language	Frame 1	Frame 2
9	Dieser Bruder, ich will ihn der Kürze wegen den Freiherrn nennen, galt trotz seiner Jugend, er war nur um zehn Jahre älter denn seine schöne Schwester, für einen Mann von hervorragenden Talenten; der Fürst, obwohl schwächlich und ausschweifend, wußte seine Fähigkeiten vollauf zu würdigen, gab eine der höchsten Stellen des Landes unter seine Verwaltung und überhäufte ihn mit Ehren und Auszeichnungen.	NHG	provision	
10	Zum 65. Geburtstag wurde er mit der Fs. Aspekte der Neuen Musik (hrsg. v. W. Burde, Kassel 1968, mit Bibliogr. v. H. Poos) geehrt.	NHG	provision	
11	Unter Berufung auf sozialistische Tradition wurde das private Sortiment weitgehend ersetzt durch den »Volksbuchhandel« zur »Versorgung der Bevölkerung mit fortschrittlicher Literatur«.	NHG	provision	

TEMPORAL_DIRECTIONALITY		Language	Frame 1	Frame 2
Example				
1	Deswegen muß ihre Ausstattung mit der Zeit mitgehen und sich die Errungenschaften von Kunst und Kunstgewerbe zunutze machen.	NHG	temporal_directionality	
2	Dann wieder - und das lag wahrscheinlich daran, daß ich mit Freitag eingesperrt war - kam mir die Wohnung wie ein Tier vor.	NHG	temporal_directionality	

TOGETHERNESS	Example	Language	Frame 1	Frame 2
1	nahistin sinemu , der farfluahhanan diubil **mit** eddesuuelihha kespanst imu mit dia selbun kespanst sina fona kesihtim herzin sines farspienti keleitta ze neouuehti	OHG	togetherness	
2	auh lahhan , kenoottanteru millu kangant ioh zuuo , indi mit paulu potin lucke pruader fardoleent , indi aahtunga fardoleent ,	OHG	togetherness	
3	lendino gurdil « . In dhes chiriihhun » ardot uuolf mit lambu « , ioh dher chiuuon uuas fona dheru chiriihhun	OHG	togetherness	
4	chiriihhun nama ardhinsan . Innan dhiu ir chiuuoruan ist , mit dhem unbalauuigom ist siin samuuist . 9 . In dhes	OHG	togetherness	
5	samuuist . 9 . In dhes æuuiste » sitzit pardus **mit** gheizssinu « , bauhnit dhea nidhigun chimenghide mit sundigem .	OHG	togetherness	
6	scaap « fona smalero manno mezsse » samant uuonent « mit dhem sturirom in dheru christes chiriihhun , huuanda dhar ist	OHG	togetherness	
7	leo dhar ezssant samant spriu « , huuanda dhea herostun mit dheru smelerun dheodu eigun dhar chimeine lerunga . 10 .	OHG	togetherness	
8	uuihta hiuuiski arones uuihta alle dia furihtant truhtinan . luzcile mit meron zuo auhhe truhtin uber hiuuuih uber hiuuuih . inti	OHG	togetherness	
9	unreht haltis truhtin . truhtin uuer kestat imo danta mit tih kenada ist . durah uuizzud tinan fardolata dih truhtin	OHG	togetherness	
10	...kihaltidu morganlihera uncin ce naht uuane israhel in truhtine danta **mit** truhtinan kenada inti kenuhtsamiu mit inan erlosida inti her erlosit israhelan fona allen unrehtun sinen	OHG	togetherness	
11	uuane israhel in truhtine danta mit truhtinan kenada inti kenuhtsamiu **mit** inan erlosida inti her erlosit israhelan fona allen unrehtun sinen	OHG	togetherness	
12	Kot almahtigo, kauuerdo mir helfan enti kauuizzida mir ia furistentida ia gaotan uuillun saman mit rehten galaupon mir fargepan za dinemo deonoste . trohtin ,	OHG	togetherness	
13	enti gauuerdo mir fargeban keuuizzida enti furistentida , cutan uuillun mit rehtan galoupon za dinemo deonosta . trohtin , du in	OHG	togetherness	

TOGETHERNESS	Example	Language	Frame 1	Frame 2
14	Chit ouch dara zuo risibile . Taz ne habet er mit nehenemo gemeine : so na maht tu inan baz	OHG	togetherness	
15	1 . Gorio vuor zi mahalo **mit** michilemo herio , vona dero marko mit michilemo folko .	OHG	togetherness	
16	Dô teiltôn si inan sare zi demo karkâre . dar mit imo do vuorun engila dê skônun . Dar vand er	OHG	togetherness	
17	haubitgelt inti wirđriun . 7 . So hwer so su mit farahum forstilit , gelte soł XVII , foruzan haubitgelt inti	OHG	togetherness	
18	daz die fone dero rehtere gotis urteili danni ferfluochoti farent **mit** demo tiufalo unde mit allen den unreinen keisten in daz	OHG	togetherness	
19	rehtere gotis urteili danni ferfluochoti farent mit demo tiufalo unde **mit** allen den unreinen keisten in daz euuigi fiur dero hella	OHG	togetherness	
20	eino truhtin , Thu eino hohosto , Heilento Christ , mit uuihen adume In guatlichi gotes fateres . Amen .	OHG	togetherness	
21	So teta unser trotin , to er an der uuerilte mit menischon uuas ze diu , daz ter fient nihet uerstunde	OHG	togetherness	
22	In anaginne uuas uuort inti thaz uuort uuas mit gote inti got selbo uuas thaz uuort . Thaz uuas	OHG	togetherness	
23	otag , ther habeta sculdheizon , inti ther uuas unliumunthaft mit ímo , samaso her ziuúrfi siniu guot . Inti gihalota	OHG	togetherness	
24	arstig furdir . Thanne ist thir tíurida fora then thie mit thir samant sizzent , uuanta eogilih ther sih arheuit uuirdit	OHG	togetherness	
25	inti slíumo findet ir eina esilin gibuntana inti ira folon mit iru gibuntanan , in themo neoman neo in aldere manno	OHG	togetherness	
26	Fariseus inti ander uuas firntatig . Ther Fariseus stantenti thisiu mit imo selbomo betota : got , thanc tuon ih thir	OHG	togetherness	
27	thisu zeihhan tuon thiu thu tuos , nibi got sí mit imo . Thô antlingita ther heilant inti quad imo :	OHG	togetherness	
28	Inti sie ni forstuontun thaz uuort thaz her sprah zi in , inti nidar stigenti mit in quam zi Nazareth , uuas in untar thiutit .	OHG	togetherness	collaboration

TOGETHERNESS	Example	Language	Frame 1	Frame 2
29	heilant thêh in spahidu inti in altere inti in gebu **mit** gote inti mit mannun .	OHG	togetherness	
30	in bifiengin in uuorte . Inti santun imo sine iungiron mit Herodes mannun sus quedante : meistar , uuir uuizumes thaz	OHG	togetherness	
31	bruoder sina quenun inti aruueke samon sínemo bruoder . Uuarun mit úns sibun bruoder , inti ther éristo ginomanero quenun arstarb	OHG	togetherness	
32	quad ther heilant : noh nu luzila stunta bim ih mit íu , inti ih faru zi themo thie mih santa	OHG	togetherness	
33	thiu sprihhu ih . Inti thie mih santa ther ist mit mir : her ni furlazit mih einon , uuanta ih	OHG	togetherness	
34	min uuort ni bifahit in iú . Thaz ih gisah mit minemo fater thaz sprihhu ih , inti ir thiu ir	OHG	togetherness	
35	fater thaz sprihhu ih , inti ir thiu ir gisahut mit fater íuuuaremo thaz tuot ir . Thó antlingitun sie inti	OHG	togetherness	
36	sie sin blinte . Inti gihortun fon then Fariseis thie mit imo uuarun , inti quadun imo : eno nu birun	OHG	togetherness	
37	theru steti thár ingegin imo quam Martha . Thie Iudei **mit** iru uuarun in themo hus inti sia fluobritun , mit	OHG	togetherness	
38	Tho ther heilant gisah sia vvuofenti inti thie Iudæon quamun mit iru vvuofente , gremizota in sinemo geiste inti gitruobta sih	OHG	togetherness	
39	tage thahtun erslahan inan . Ther heilant nalles ofano gieng mit then Iudeon , oh gieng in lantscaf nah theru vvuostinnu	OHG	togetherness	
40	thiu dar giquetan ist Ephrem , inti thar uuoneta her mit sinen iungiron . Nah uuas tho óstron Iudæono , inti	OHG	togetherness	
41	, inti Martha ambahtita , Lazarus uuas ein thero thie mit imo sazun .	OHG	togetherness	
42	uuerc uuirkit siu in mir . Ir habet simbulun thurftigon mit îu , inti thanne ir uuollet , mugut in uuola	OHG	togetherness	
43	inti biginnit thanne slahan sine ebanscalca , izzit inti trinkit mit trunkanen : quimit ther herro thes scalkes in themo tage	OHG	togetherness	
44	uueiz , inti ziteilit inan , inti sinan teil sezzit **mit** lihhezerin inti mit ungitriuuuen . Thar ist vvuoft inti stridunga	OHG	togetherness	

TOGETHERNESS	Example	Language	Frame 1	Frame 2
45	quam ther brutigomo , inti thio dar garauuo uuarun ingiengun mit imo zi theru brútloufti , inti bislozzano uuarun thio duri	OHG	togetherness	
46	munizzerin , inti ih quementi intfieng thaz dar min ist mit pfrasamen . Nemet fon imo thia einun talenta inti gebet	OHG	togetherness	
47	in ther diuual zi sihueliheru zîti ; uuas her thô mit uuildirun , giengun thô zuo gotes engila inti ambahtitun imo	OHG	togetherness	
48	gabi thu minan scaz zi mázzu , inti ih quementi mit phrasamen thaz erbeitti ? Inti az stantenten quad : nemet	OHG	togetherness	
49	cumit ther mannes sun in sineru mihhilnessi inti alle engila mit imo , thanne sizzit her obar sedal sinera mihhilnessi .	OHG	togetherness	
50	ob ih thih ni uuasgu , thanne ni habes teil mit mir . Tho quad imo Simon Petrus : trohtin ,	OHG	togetherness	
51	gicos , uzoh thaz gifullit uuerde tház giscrib : ther mit mir izzit brót ther hefit uuidar mir sina fersnun .	OHG	togetherness	
52	min zít nah ist , **mit** dir duon ih ostron mit minen iugiron . Inti her giougit íu mihilan soleri gistreuuitan	OHG	togetherness	
53	ezzenten quad tho : Lustonto lusta theso ostrun zi ezzanne mit iu , er thanne ih thrue . Ih quidu íu	OHG	togetherness	
54	quidu íu , uuanta fon nu ni izzu ih iz mit iu , er thanne iz gifullit uuirdit in gotes rihhe	OHG	togetherness	
55	sie thô inti gisahun uuâr her uuoneta , inti uuonetun mit imo then tag ; thô uuas thiu zehenta zît thes	OHG	togetherness	
56	fon thesemo berde uuinrebun unzan then tag thanne ih trinku mit íu niuuaz in mines fater rihhe . Thaz duot ir	OHG	togetherness	
57	bruoder . Kindilin , noh nu luzzila stunta bin ih mit íu : ir suohet mih , inti sos ih quad	OHG	togetherness	
58	ih nio in altere ni uuirdu bisuihan , thie dar mit dir garo bin oda in carkeri oda in tód zi	OHG	togetherness	
59	quad imo ther heilant : so mihila zit bin ih mit íu , inti ir ni forstuontut mih . Philippus ,	OHG	togetherness	
60	bin , truhtin . Forhta bifieng inan inti alle thie mit imo uuarun in thero fisco fahungu thie sie thó gifiengun	OHG	togetherness	

TOGETHERNESS	Example	Language	Frame 1	Frame 2
61	inti thie buohera einratlihho ruogenti inan . Uozzirnita inan Herodes **mit** sinemo herige inti bismarota giuuatitan mit uuizzu giuuatu , inti	OHG	togetherness	
62	Uuarun gileittit andre zuene ubile mit imo , thaz sie uuarin erslagan . Inti after thiu	OHG	togetherness	
63	fon themo cruce . Sama thie heroston thero bisgofo bismaronti **mit** then buoherin inti mit then alton quadun : andre teta	OHG	togetherness	
64	carcari . Vuard thár reda gitán fon thén iungiron Iohannes mit thén Iudeon fon thero subarnessi . Inti quamun zi Iohanne	OHG	togetherness	
65	zi Iohanne inti quadun imo : meistar , thie thar mit thir uuas ubar Iordanen , themo thú giuuizscaf sagetus ,	OHG	togetherness	
66	uuidar uurbun fer . Inti managu uuib , thiu dar mit imo saman uf stigun fon Galileu zi Hierusalem , Untar	OHG	togetherness	
67	thes eristen giuuesso brahun gibeinu in thes andres thie dar mit imo erhangan uuas . Tho sie zi themo heilante quamun	OHG	togetherness	
68	erda , quadun zi ín : uuaz suochet ir lebentan mit toten ? N ist er hier , oh her arstuont	OHG	togetherness	
69	inti quamun zi imo , inti teta thaz uuarun zueliui mit imo , thie namta her boton . Simonem , then	OHG	togetherness	
70	thero heithaftono alliu thiu dar gitan uurdun . Inti gisamanote mit then alton girate intfanganemo ginuhtsaman mietscáz gabun then kenfon quædenti	OHG	togetherness	
71	alliu then einliuin vvuofenten inti riozenten inti anderen allen thie mit imo uuarun . Inti sie tho gihorenti thaz her lebeta	OHG	togetherness	
72	mit ín suohtun , Inti ther selbo heilant nahlichonti gieng **mit** ín : iro óugun uuarun bihabetíu , thaz sie inan	OHG	togetherness	
73	inti intheldit ist iu ther tag . Inti in gieng **mit** ín . Inti uuard tho , mittiu her saz mit	OHG	togetherness	
74	, inti fundun gisamanote thie éinliui inti thie thie dar mit ín uuarun sus quædenti , thaz trohtin arstuont uuarlicho inti	OHG	togetherness	
75	ih sprah zi íu , mittiu ih noh thanne uuas mit íu , bidiu uuanta notdurf uuas zi gifullanne alliu thiu	OHG	togetherness	

TOGETHERNESS	Example	Language	Frame 1	Frame 2
76	zúueliuín , ther dar ist giquætan Didimus , ni uuas mit ín thanne ther heilant quám . Tho quadun imo andere	OHG	togetherness	
77	faru fisgon . Tho quadun sie imo : quæmemes uuir mit thir . Inti uz giengun tho inti arstigun in skéf	OHG	togetherness	
78	uúelichiu so ih íu gibot . Inti senu ih bin mit íu allen tagon unzan enti uúeralti . Ther de giloubit	OHG	togetherness	
79	: ni forhti thir , Maria , thu fundi huldi mit gote ; seno nu inphahis in reue inti gibiris sun	OHG	togetherness	
80	lahhan . Inti so uuer so thih thuinge thaz thu **mit** imo gést thúsunt scrito , fár mit imo andere zuene	OHG	togetherness	
81	thuinge thaz thu mit imo gést thúsunt scrito , fár **mit** imo andere zuene . Thie fon thir sihuues bite ,	OHG	togetherness	
82	, Abrahame inti sinemo samen zi uuerolti . Uuoneta Maria mit iru nah thri manoda , inti uuarb zi ira hûs	OHG	togetherness	
83	thaz truhtin mihhilosota sína miltida mit iru , inti gifahun **mit** iru . Uuard thô in themo ahtuden tage , quamun	OHG	togetherness	
84	uuaz uuanis these kneht sî ? inti gotes hant uuas mit imo . Inti Zacharias sîn fater uuard gifullit heilages geistes	OHG	togetherness	
85	giu sint mino turi bislozano , inti mine knehta sint mit mír in camaru , ni mág arstanten inti geban thír	OHG	togetherness	
86	giskentit inan , thanne hér quimit in diuridu sines fater mit heilagen engilon . Ni curet uuanen thaz ih quami senten	OHG	togetherness	
87	sosama gelte soł XV . 3 . đer anđran menit mit urcunđeom zi sinemo huuse cueme inti đanne gibanni ini erđo	OHG	togetherness	
88	íu , thaz manage óstana inti uuestana quement inti sizzent mit Abrahame inti Isake inti Iacobe in himilo rihhe ; kind	OHG	togetherness	
89	in thie burg thiu ist giheizan Naim , inti fuorun **mit** imo sine iungiron inti ginuhtsamo menigi . Mit thiu her	OHG	togetherness	
90	inti giheizzent sinan namon Emmanuel , thaz ist arrekit : mit uns got . Arstantanti thô Ioseph fon slafe teta só	OHG	togetherness	

TOGETHERNESS	Example	Language	Frame 1	Frame 2
91	man fon themo thie diuuala úz giengun , thaz her mit imo uuari , inti ni liez ín , ouh quad	OHG	togetherness	
92	ubar thie theki , inti thuruh thie thekiziegala santun inan mit thiu bettu in mitti furi then heilant . T hero	OHG	togetherness	
93	húse , senu thó manage firnfolle inti suntige quemente sazun **mit** themo heilante inti mit sinen iungoron : uuarun manage thie	OHG	togetherness	
94	. Gisahun tho thie buohhara inti Pharisei thaz her áz mit then suntigon inti then firnfollun , quadun sinen iungiron :	OHG	togetherness	
95	inti then firnfollun , quadun sinen iungiron : zi hiu mit then firnfollun inti then suntigon ízit inti trinkit íuuer meistar	OHG	togetherness	
96	Eno mugun thiu kind thero brútloufti só langо thie brutigomo **mit** ín ist fasten ? Quement taga mit thiu arfirrit uuirdit	OHG	togetherness	
97	ist mera thanne Ionas ! Sundirinu cuningin arstentit in tuome mit thesemo cunne inti furnidirit íz , uuanta siu quam fon	OHG	togetherness	
98	inti gigaruuit . Thanne ferit inti nimit sibun geista andere mit imo uuirsiron thanne her si , inti in gangente artont	OHG	togetherness	
99	bivvuntanaz inti gilegitaz in crippa . Thô sliumo uuard thar mit themo engile menigi himilisches heres got lobontiu inti quedentiu :	OHG	togetherness	
100	: uuer biruorta míh ? Tho quad Petrus inti thie mit imo uuarun : meistar , theso menigi thrukent thih inti	OHG	togetherness	
101	n ist , ther ist uuidar mír , inti thie mit mir ni samanot , ther zispreitit . Bithiu quidu ih	OHG	togetherness	
102	thaz Dauid teta , mit thiu ín hungirita inti thie **mit** imo uuarun , vvuo her ín gieng in thaz gotes	OHG	togetherness	
103	, mín ir samanonte thén beresboton arvvurzalot saman then uueizi mit imo . Lazet iogiuuedar uuahsan únzan zi arni : in	OHG	togetherness	
104	inti Simon inti Iudas , inti sino suester eno allo mit uns sint ? uuanan thesemo alliu thisiu ? Inti uuarun	OHG	togetherness	
105	gihorta Herodes ther cuning , uuard gitruobit inti al Hierusalem mit imo , inti gisamanota then hêrduom thero biscofo in thie	OHG	togetherness	

TOGETHERNESS	Example	Language	Frame 1	Frame 2
106	thrato , inti in gangante in hûs fundun then kneht mit Mariun sinero muoter , inti nidar fallente betotun inan .	OHG	togetherness	
107	skef ni uúas nibi einaz , inti thaz ni gieng mit sinen iungiron ther heilant in thaz skef , nibi einon	OHG	togetherness	
108	thiz uuort , uuer mag thaz gihoren ? Uuizzanti heilant mit imo selbomo thaz murmorotun fon thiu sina iungoron , quad	OHG	togetherness	
109	Bat inan sum Phariseus thaz he goumoti mit imo . Inti in gieng inti gisaz . Bigonda the	OHG	togetherness	
110	in , thio uuisun uuarlihho intfiengun oli in iro faz mit liohtfazzon . Tuuuala tuonti themo brutigomen naffezitun allo inti sliefun	OHG	togetherness	attribute
111	. Tho gieng zi imo thíu muoter thero kindo Zebedéuses mit iro kindon betonti inti bát sihuuaz fon imo . Her	OHG	togetherness	concurrence
112	, trohtin ? Then quad er : ther de thuncot mit mir sina hant in thesa scuzzilun ther selit mih .	OHG	togetherness	concurrence
113	. Tho quad imo Petrus : zisperi oba mir gilimphit mit dir zi sterbanne , thanne ni forlougnu thin . Sama	OHG	togetherness	concurrence
114	Tho uuarun erhangan mit imo zuene thioba , ein zeso inti ander in sina	OHG	togetherness	concurrence
115	eini manne . tô gebôt er iu ze demo lebinne mit minnon hie ze wesinne , taz ir wârint als ein	OHG	togetherness	manner
116	ubilan sih suannet . . . . unuuirdigan quedenti imu mit uuizzagin : " ze neouuiehti keprauhoter pim . . .	OHG	togetherness	means
117	herzin kelaube minna theononte sih . . . . qhuedenti mit uuizzagin : " ih keuuisso pim uurum . . .	OHG	togetherness	means
118	Dat gafregin ih mit firahim firiuuizzo meista , dat ero ni uuas noh ufhimil , noh paum...	OHG	togetherness	
119	cot , manno miltisto , enti dar uuarun auh manake mit inan cootlihhe geista . enti cot heilac . Cot almahtico	OHG	togetherness	
120	Abande giuuortanemo quam inti gisaz mit sinen zuelif iungiron , inti in ezzenten quad tho :	OHG	togetherness	
121	inti anderan fluobreri gibit her íu , thaz her uuone mit iu zi euuidu , Geist uuares , then thisu ueralt	OHG	togetherness	

TOGETHERNESS	Example	Language	Frame 1	Frame 2
122	ni uueiz inan : ir uuizzut inan , uuanta her mit íu uuonet inti in íu ist . Ni forlazzu iuuuih	OHG	togetherness	
123	minnot inan , inti zi imo comenmes inti uuonunga tuomes mit imo . Ther de mih ni minnot minu uuort ni	OHG	togetherness	
124	heilant : uuar quidu h thir , hiutu bis tu mit mir in paradiso .	OHG	togetherness	
125	inti thaz suueizlachan thaz dar uúas oba sinemo houbite nalles mit then lininen lachanon ligenti , oh suntringon biuuntan in eina	OHG	togetherness	
126	rumor faran . Inti beitun ínan sus quædenti : uúone mit úns , uuanta iz abandet inti intheldit ist iu ther	OHG	togetherness	
127	mit ín . Inti uuard tho , mittiu her saz **mit** ín , intfieng thaz brót inti giuuihita inti brah inti	OHG	togetherness	
128	ahto tagon abur uuarun sine iungoron inne , inti Thomas mit ín . Quam ther heilant bislozzanen túron inti stuont in	OHG	togetherness	
129	thinemo uuidaruúorten sliumo , mit thiu thu bist in uuege **mit** imo , min odouuan thih sele thin uuidaruuorto themo tuomen	OHG	togetherness	
130	inti thriio naht . Thie Nineuiscun mán arstantent in tuome mit thesemo cunne inti furniderent íz , uuanta sie riuua tatun	OHG	togetherness	
131	, nibi her ér sizzenti thenke , oba her mugi **mit** zehen thusuntin themo ingegin faran ther mit zueinzug thusuntin quam	OHG	togetherness	
132	Aseres , thiu gigienc fram in managa taga inti lebeta mit ira gommanne sibun iâr fon ira magadheiti , inti thiu	OHG	togetherness	
133	ci sinen ebaniungiron : gemes uuir , thaz uuir sterben mit imo . Tho quam ther heilant inti fant inan fior	OHG	togetherness	concurrence
134	daz meinet daz da uurstesot diu tiure minna uber al , der goteliche wîstuom , mit allemo wolewillen . Siu ist in goldes sconi , samo	OHG	attribute	togetherness
135	tugindan ân aller missetate pflega . Da rîchisôt diu minna **mit** aller miltfrowida und aller tugidone zála mit stâten urasmunde .	OHG	manner	togetherness
136	si . da nant er si be namen . unde sait ir si waere aller gnaden uol . got waere mit ir . uor allen wiben waere ovch si gesegenet . Uon der botscefte erchom si uil harte . si uorhte	MHG	togetherness	

TOGETHERNESS	Example	Language	Frame 1	Frame 2
137	uon siner gemahelen der ersten muoter der frovwen eua . den uns nu enphvort hat mit dem ewigem leben . **mit** dem heiligem christe den si hivte enphangen hat div ander muoter scena MaRia . Div erste muoter des ewi=gen todes	MHG	togetherness	
138	so wider ze sinen alten chreften . die er het e . er unsern herren mit der ungehorsam uermant . **Mit** dem sichen werden wir alle uon unserm sihtum wol beruht . ob wir iz mit innechlichem hercen da ze got	MHG	togetherness	
139	uerborgen . herce min betrubet ist uerlazen hat mich chraft miniv un lieht ovgen miner un daz selbe nieht ist mit mir friwent mine un nasten min wider mich nahenten un stunten . un die da bi mir waren uon uerren	MHG	togetherness	
140	. sunder mines uadir willin . die mich da hait gesant . Ovch scriuit uns sente lucas . dat ihenc mit marien . un Joseppe . varende von ihrlem . in underdenich was . an disin drin dingin . kuschecheite .	MHG	togetherness	
141	dat spitale heizit . So sezzen wir . dat man in deme obersten hus . oder da der meister . mit deme capitele ze raide wirdet . spitale haue . ze allin citin . auer anderswa . da man ein gemachet	MHG	togetherness	
142	ordenes . di ane spitail sint . sol man einkein spitail machen . ane des meistrers suenderlichen ordenunge . mit der wisir bruodre raide . wie man die siechen in die spitale enphahe . Alsus sal man die siechen in	MHG	togetherness	
143	suon=tagin . die epistelin . un dat ewangeliun lesin . unde mit deme wihewazzre besprengin . un zuo in gein **mit** ꝑcessione . In anderen spitalin sal man in alle tage minecliche z enbizene geuen ze geuellicher cit . An den	MHG	togetherness	
144	ersamecheit . under den teil mer an sehe denne die menege der bruodere . ANder cleine rede . muogen sie mit den wizzegesten bruoderen . die bi in sint uerenden . Etzeliche cleine gescheffede muogen sie uon ... unde zuo cafspilen	MHG	togetherness	
145	geuen einem armen uor sine sele . van der sorgen des meisters vmbe die bruodere . IN der archen waren mit einander gele=get due	MHG	togetherness	

TOGETHERNESS	Example	Language	Frame 1	Frame 2
	gerte . un dat himelbroit . die uons dat wisent . dat an den berihteren dei zuuei			
146	. unde suche genade demutecliche . Is ouch dat hei ime des nith en uolget . unde wirt der selue mit merreme gezuge uor deme ouersteme . unde den bruoderen uerwn=nin . den sal man billiche desde hertlicher duon buozen .	MHG	togetherness	
147	dat due scholt so groz is . so sal man in sunderen uan der bruodere geselleschefte . unde sal nith mit in ezzen an irren dische . man sal in sunder setzen . Des meisters . unde der bruodere orde=nunge .	MHG	togetherness	
148	dat zwene bruodere . oue mer kuoment an eine stait . da wir nith huses in hain . die herbergen mit einander . ouf it sin mach mit fuogen . Inkein bruoder sal enpfahen die brieue ze uuorenne . die	MHG	togetherness	
149	inde hoird it bit oren ... Benedicamus patrem et filium cum sancto spiritu Wir loven den vader inde den suon **bit** deme heiligen geiste Weirliche de lovit den vadir de in lovit in deme geiste inde in der wairheit inde de	MHG	togetherness	
150	vluzit he diner selen gegenwordich in want he is werlicher in sulcher selen dan in deme liflicheme hiemele da he mit den engelin wanet salt du is da gebruochen du salt it hie z eirst winnen andirs in wuordis duo is	MHG	togetherness	
151	sich hie beginnen inde mit uns ewich sin dat is alleine bekentenisse inde minne inde gebruoginge diese dru die sint **mit** uns ewich die andere stervent alle mit uns wat der is sunder diese dru die hevent hie ane inde werint	MHG	togetherness	
152	bizdaz sie weich werden so nim denne schoen brot / vnd ein wenic pfeffers dri stunt als vil kuemels **mit** ezzige vnd mit biere . mal daz zvosammen vnd tuo dar zvo saffran vnd seige abe daz sode vnd	MHG	togetherness	
153	. ich sage uch daz vil lute von osten . vnde von westen kvmen . vnde sullen czu tysche siczen **myt** abraham . vnde ysaac vnde mit iacob . vnde in dem riche der hemele Abir dy kyndere des riches sullen	MHG	togetherness	

TOGETHERNESS	Example	Language	Frame 1	Frame 2
154	lute von osten . vnde von westen kvmen . vnde sullen czu tysche siczen myt abraham . vnde ysaac vnde **mit** iacob . vnde in dem riche der hemele Abir dy kyndere des riches sullen uz gewrfen werden in daz uzere	MHG	togetherness	
155	vil scharen noch an dem dritten suntage s . s . matheus In der czit . gyngen vz dy pharisei **mit** den herodianen . vnde machten eynen rat wy sy ihesum vorlorn vnde ichtwiche by daz mer mit synen iungern	MHG	togetherness	
156	dy pharisei mit den herodianen . vnde machten eynen rat wy sy ihesum vorlorn vnde ichtwiche by daz mer **mit** synen iungern . vnde eyne groze schar waz gevolget ym von iherusalem . vnde von ydumeam . vnde vbir den	MHG	togetherness	
157	vnde ouch dem mere . vnde sy synt ym vndirtenik . Lucas In der czit gynk ihesus an dem wege myt synen iungern . do sprach eyner czu ym ich volge dir swar du gest . do sprach her czu ym	MHG	togetherness	
158	gegebyn . vnde sy begonden czu murmelen . kegen dem huswirtte . vnde sprachen . dy lesten woren eyne stunde mit vns . vnde dv hast en vnde vns glich gelonet . vnde wir han dy burde getragen al durch den	MHG	togetherness	
159	schiffeten do quomen sy czu nazareth alczuhant do sy uz dem schyffe quomen do bekanten sy en . vnde gyngen **myt** ym also wyte alse daz lant waz do begonden dy lute dy sychen czu ym czu tragene myt den betten	MHG	togetherness	
160	des hertriches . dri tage vnde dri nacht . dy man . von nyniven sullen uf sten in deme gerich=te myt deseme geslechte . vnde sullen ez vor=tumen . wenne sy buze geleist han in der pre=digate ionas . vnde me	MHG	togetherness	
161	keiser als alle die tatin die in me lande warn . zv deme male ging vnser vrowe sente marie groze mt irm liben kinde deme heili=gen criste . alda genas sie des seiligen kindes . vnde bewant iz mt snoden	MHG	togetherness	
162	gerecht man . der mante daz volk . vnd gebot beide phaffen vnd leien . muonichen . vnd nvonnen . **mt** den cruocen gen vnd mt deme	MHG	togetherness	

TOGETHERNESS	Example	Language	Frame 1	Frame 2
	heilichtvome . vnd hiez sie vnsern heren got bitten daz er die groze not			
163	daz volk . vnd gebot beide phaffen vnd leien . muonichen . vnd nvonnen . mt den cruocen gen vnd **mt** deme heilichtvome . vnd hiez sie vnsern heren got bitten daz er die groze not gestillete . daz ne half	MHG	togetherness	
164	got bitten daz er die groze not gestillete . daz ne half alliz niht . vnderdes daz sie gin=gen mt den cruocen wullen vnd baruuos . so qam ein weter vnd ein duonerslag vnd sluog den pabist selbin zv tode	MHG	togetherness	
165	sich alle die samene die zv Rome warn . vnd da bi in keiner nehnde . vnd hiez sie gen mt den cruocen . vnd mit den hei=lichtuome von latrane zv sente paulo . von danen zv sente petro . vnd	MHG	togetherness	
166	zv Rome warn . vnd da bi in keiner nehnde . vnd hiez sie gen mt den cruocen . vnd mit den hei=lichtuome von latrane zv sente paulo . von danen zv sente petro . vnd sang er die messe selbe	MHG	togetherness	
167	si wir gotis gezuge sa Daz wir z immir stete han Do diz also was irgan Sie kertin gemeinliche do Mit iosue hin gein sylo Vnd bestetin da di sichirheit Als dort was uon in uf geleit Dem hoisten gote immir	MHG	togetherness	
168	uil Tet zu crichin sine zil Chatinus den ich han genant Vnd fenix ein stolcz wigant Von thebe vuren do **mit** her Vnd besazin mit starkir wer In einir inselin hiez zirta Von dan betwungen sie sa Thyre . vnd sydonie	MHG	togetherness	
169	Daz er in vor wesin solde Mit rate mit lere mit craft Gein chanaan der heidinschaft Di gein in saz **mit** wer do Got vndirwisete sie also Daz daz geslechte uon iudas Vnd daz uon im geborn was Solde ir leiter	MHG	togetherness	
170	beidin Wart ein sicherheit getan Wisliche giengin sie z an Als di sichirheit geschach Di zwei kuonne man sach Varn mit grozir herschaft Vf di uirvluchtin heidinschaft Di in besech wonende was Symeon . vnd der helt iudas Slugen da zehin	MHG	togetherness	

TOGETHERNESS	Example	Language	Frame 1	Frame 2
171	Dar vz namen sie die vaz Guldin gut . die da waren Zv lobe gote dem waren Vnde vurten sie mit in In daz lant sennaar hin Nabuchodonosor hiez Sin gebot man nicht en liez Daz geveze tragen vort Merende	MHG	togetherness	
172	gedult an dem vritage dor noch schribit . s . iohannes In der czit saite ihesus synen iungeren . der **myt** myr nicht ist . der ist wedir mich . vnde der myt mir nicht sament der czustrouwet . dar	MHG	togetherness	agreement
173	der czit saite ihesus synen iungeren . der myt myr nicht ist . der ist wedir mich . vnde der **myt** mir nicht sament der czustrouwet . dar vmme sage ich uch . alle sunde . vnde alle honsame schymphe	MHG	togetherness	agreement
174	loese abe die hut als gantz vnd suede in gar vnd loese vz die grete nim krut vnd stoz daz mit dem vische . tuo dar zvo ro eyer vnd saffran vnd fuelle die hut des hechdes vnd roeste in ein	MHG	togetherness	instrument
175	uz der menige der sunten . rurt im mit dem uinger sinen munt . unt siniv oren . gab im **mit** der gebe sines heiligen gaistes . rehte sinne . daz er uersten unt gesprechen chunde sine heilige lere . braht	MHG	means	togetherness
176	sine zil Chatinus den ich han genant Vnd fenix ein stolcz wigant Von thebe vuren do mit her Vnd besazin **mit** starkir wer In einir inselin hiez zirta Von dan betwungen sie sa Thyre . vnd sydonie di lant Daz sie	MHG	togetherness	means
177	ioh-is . unde der meister uan deme temple . Dei erze=bischoffe . unde dei hohen luede des seluin riches . mit der raide . dirre uor genanter herzoge uan suuauin . sine botin sante uber mer an sinin bruodir kuoninc heinriche	MHG	togetherness	
178	So dat gebeit gesprochen is . unde die bruodere uop sint gestan=den . kuomet danne ein bruoder . dei sizze mit den anderen . unde spreche sin gebet sitzende . oue spreche it nach deme capitele . dat de einunge nith	MHG	togetherness	
179	ewich die andere stervent alle mit uns wat der is sunder diese dru die hevent hie ane inde werint eweliche **mit** uns wanne ich ein dinc	MHG	togetherness	

TOGETHERNESS	Example	Language	Frame 1	Frame 2
	horen inde behalden inde weis nochdan in is id min niet wanne ich mich			
180	wirdis tu vortumet an dem suntage vor uasten schribit sente lucas In der czit . nam ihesus syne iungeren mit ym . vnde sprach . set wir gen vf czu iherusalem . vnde iz sal vollenbracht werden alliz daz y	MHG	togetherness	
181	in der pre=digate ionas . vnde me wenne ionas . dy ku=negynne von osten sal uf sten an deme gerichte myt deseme geslechte . vnde sal iz vortumen wenne sy kumen ist czu horende dy wisheit salomonis . vnde mer wen	MHG	togetherness	
182	sin dat is alleine bekentenisse inde minne inde gebruoginge diese dru die sint mit uns ewich die andere stervent alle **mit** uns wat der is sunder diese dru die hevent hie ane inde werint eweliche mit uns wanne ich ein dinc	MHG	togetherness	concurrence
183	. sprach ihesus czu synen iungeren . alse des menschen sun ku=myt myt syner macht . vnde alle syne engele **myt** ym . so syczit her uf den stul syner gewalt . So sullen vor ym gesament werden alle lute .	MHG	togetherness	
184	kint mt tuochen be=wuonden . daz ligt in einer krippen . zvhant do er diz hatte gesprochen . do er=schein mt im eine groze schar des himelischen heris . vnd lobeten den al=mechen got vnd sprrachen . Gloria in ex .	MHG	togetherness	
185	die heiligen it si Got O guoit inde guode guoide mich mit diner guoiden so werde ich guoit inde edel **mit** dinen engelen inde mit dinen heiligen zuo intfeine dat guoit dat du biz Inde etzelich wort wart gesprochen von heydenen	MHG	togetherness	
186	genzeliche geheizen . so sal ime der ouferste onf hei da gegenwortihc is . ovfe der prister . den manteil **mit** deme cruce geuen . der da gesegenet si . mit der gewonlicher senungen . unde mit deme wihewazsere besprenget .	MHG	attribute	togetherness
187	vnde gyngen myt ym also wyte alse daz lant waz do begonden dy lute dy sychen czu ym czu tragene **myt** den betten swar sy en wosten . vnde swo her gynk uf der straze in den dorfen adir in den	MHG	instrument	togetherness

TOGETHERNESS	Example	Language	Frame 1	Frame 2
188	der im dient avf gnade der schol haben daz selbe reht daz der gedingt kneht hat Swelch bvrger den andern mit verdahten mvot **mit** samenvnge mit stecken oder mit stain oder mit dehainer slahte wer missehandelt . so sol der da	MHG	instrument	togetherness
189	geuolget ovh er in so uerre . daz er selbe chom uiench den sichen bi den hanten . uurt in **mit** rate uz der menige der sunten . rurt im mit dem uinger sinen munt . unt siniv oren . gab	MHG	means	togetherness
190	got kinde abe der livte in der deche der deche diner getruwent si werdent getrenchet uon genuhte huses dines un mit wazzer wolluste din getrenchest du siv . want ze dir ist brunne des lebens un in liehte dinem gesehen wir lieht	MHG	means	togetherness
191	495. gotes das jrrend schafel wyder funden het , da trug er es auf seiner achsel mit dem heylligen creuczs fur got , seinen hymelischen vatter (.) dem pefalch er in disem	ENHG	togetherness	
192	545. geystlychen haubts hercz mein hercz (.) o wie ist mir so wol , so jch mit jesus hab ain hercz vnd das ist kain wunder , so doch dye menig aller	ENHG	togetherness	
193	614. werben / (.) vmb solches ab schlahen hat Volodimer den Rochuolochda bekhriegt / vnd den **mit** zwayen Suenen erschlagen / vnd die Rochmida mit gwalt genommen / , nachmals wider seinen	ENHG	togetherness	
194	631. , hat der Schweher ain vrsach des Kriegs wider seinen Aydn genomen / vnd ist mit dreyen hoeren wider jne an gezogen . (.) Das ain hoer ist nach dem Land Sewera	ENHG	togetherness	
195	638. Silber vnd Gold vnd andere Güetter auf dreyhundert waegen , seindt wol khlaine waegen / mit zwayen Phaerdtn gar gering , von dann gen Mosqua gefüert / (.) er ist allain	ENHG	togetherness	
196	755. / , dann , da er sprach mit begierd , hab ich begert das Ostermal **mit** euch zu essen / , hat nit bedeut der Juden , Pasca das er zuuor	ENHG	togetherness	
197	756. zu essen / , hat nit bedeut der Juden , Pasca das er zuuor almal mit jnen geessen hat	ENHG	togetherness	

TOGETHERNESS	Example	Language	Frame 1	Frame 2
	/ , da er sprach das thuet in meiner gedechtnuß / ,			
198	837. in ihren Kirchen ? (?) Tragen nicht auch etliche Praedicanten Chorroeck / vnd das Creutz mit jhren Leuchtern ? (?) Thuen sie nicht auch den Hut ab zum Gebett ? c	ENHG	togetherness	
199	1171. (.) als komend die von basel an su mit macht , dz der von Rechberg **mit** den sinen die flucht nam , sin Rog ab warff vnd salerr , der Rog	ENHG	togetherness	
200	1173. , sleffte es in , dz er muost sich anders cleiden (.) donoch wolte es mit jm in den graben gesprunge{6} sin sant alban , im koremerg warff es in abe	ENHG	togetherness	
201	1206. , nam der wind die tilen gegen dem Rine anhin mit gewalt , warff su **mit** andrem zimberholtz vber den turn zuo sant alban in den kilchoff , das vnsaglichen ist	ENHG	togetherness	
202	1223. ein lange zitt (.) Jten die schinder die moerder komend qarta p{5} bartholomei fur basel mit setzigtusent mane{6} , anno xliiij (.) fruege uff die viij des tages beschach ein grosser	ENHG	togetherness	
203	1239. marie xlv zugend die von basel mit macht , mit cc wegen , karre{6} , **mit** grossem gezuge gon Rinfelden (.) der zug werte von viij bis x , die zall	ENHG	togetherness	
204	1240. furst , hertzog olbrecht von oesterich , hat ein leger uff geslagen gegen Rinfelden , **mit** eime grosß{1}et , reisigen gezuge vnd fuoßfolck , mit vil wegene{6} , sluog do sin	ENHG	togetherness	
205	1244. , dz man grossen schaden dovon nam (.) Jten an dornstag donoch brach der furst mit den sinen uff , vnd brant- die hutten vnd das herr det die gezelt nider-	ENHG	togetherness	
206	1245. brant- die hutten vnd das herr det die gezelt nider- , by lx (.) zoch mit sinen gezuge , was er by jmme hatte , vnd wegen fur das horn vnd	ENHG	togetherness	
207	1246. dot (.) qanta hora gieng ein Roech zuo farnsperg uff (.) do zoech der furst **mit** sime gezuge wider hinder sich vnd legert sich die selb nacht mit macht vor krentzach	ENHG	togetherness	

TOGETHERNESS	Example	Language	Frame 1	Frame 2
208	1268. , Reben wustend , luffend su dorin , wustend was do was , truogen truben mit secken vnd huott , boesem fol , zuo veressen (.) meindend , su woltend den	ENHG	togetherness	
209	1269. an geleit , geordnet wz , die lutt bichtet hattend , zugend die von basel **mit** eime starcken zuge , Reisig , fuoßgenger , mit buchsen , nach mitternacht uff iij	ENHG	togetherness	
210	1978. das er gleich nach der begraebnuß Lazari , seines geliebten freunds , gefraget / vnd mit ihnen zuo derselben gehn Bethanien in den Flecken gegangen / , welcher ein Frantzoesische meyl	ENHG	togetherness	
211	1979. nit auß / vnd vil minder / , wann sie vernemen / , das Bilgram mit jnen komen / , die willens sein / das grabe zuo besichtigen . (.) Also	ENHG	togetherness	
212	1986. derogleichen auch die Kauffleüt mit sich auff den weg nemmen / , so da willens **mit** Carouanen [COMMA] durch grosse Wuestinen inn ferrnere ort zuo ziehen / , dieweil in den	ENHG	togetherness	
213	1991. zuo sehen . (.) Daruor heraussen theten wir abermals vnsere schuoch auß / vnd giengen mit dem Vatter Guardiano hinein zur heiligen stett . (.) An dero , alß ich gedachte	ENHG	togetherness	
214	1993. liebe Engel hast lassen verkündigen / , so bitte ich dich / , das ich mit den armen hürtlein zuo dir kome / vnd deine hailsame Menschwerdung sehe / (.) verleihe	ENHG	togetherness	
215	1994. hertzliche frewd vnd stetiges wolgefallen haben / , biß wir dich endtlich in jhenem leben mit allen ausserwoelten von angesicht zuo angesicht in alle ewigkeit an schawen moegen / (.) Amen	ENHG	togetherness	
216	1996. Jn einer andern darbey / ligend begraben / die edle vnnd Gotsforechtige Roemerin Paula [COMMA] , mit jrer Tochter Eustachia [COMMA] , welche nach jhres gemahels toedtlichen abgang dahin zum h .	ENHG	togetherness	
217	1998. das Kindlein Jesu auff seinen armen / wie im Kripplein noch ein andere / , mit dem furgeben / , das wir darbey ab nemen / vnd lehrnen sollen / ,	ENHG	togetherness	

TOGETHERNESS	Example	Language	Frame 1	Frame 2
218	2010. hinein geht / , ein tieffe verborgne hüle / , in dero die Elisabetha sich mit jrem kindlein Johane verwaret / , auff das es nit auch von Herodis dienern /	ENHG	togetherness	
219	2011. hinein geht / , ein tieffe verborgne hüle / , in dero die Elisabetha sich mit jrem kindlein Johane verwaret / , auff das es nit auch von Herodis dienern / **mit** den Bethlehemitischen kindlein vmb gebracht wurde / , daruon im Proto Euangelio Jacobi / mehrers	ENHG	togetherness	
220	2291. sie ab fielen / , vnnd Fierrbras pferdt , des streychs besorgend , lieff hin mit seinem Meyster / , als es Got gefellig was / (.) vnd ee der Heyd	ENHG	togetherness	
221	2333. fast betruebt / vnd mer , dan er beweiß oder sich erzeigt / (.) Brulland **mit** den andern Heyden , die die Frantzosen gefengklich hielten / , verzogen lenger nit / , sunder mit grosser eile ranten sie biß zuo der grossen stat Agrimore / , da der Ammiral	ENHG	togetherness	
222	2713. das die wilden sie vberziehen wuerden . (.) Wir kamen den von Garasu zu hilff mit viertzig Mannen vnsers schiffs / , fuohren in eynem kleynen schifflin dahin / (.) Das	ENHG	togetherness	
223	2714. den flecken her da lagen sie des tages inn / (.) darauß kamen sie , mit vns zu schermuetzlen / (.) Wann wir nach jnen schossen / , fielen sie alle	ENHG	togetherness	
224	3481. Gelt / vnnd gieng **mit** dem Hoffmeister auff das Ritterhaus / (.) der lies sie mit einer Frawen / , einer Magd vnnd dem Eseltreiber / an Seylen zu einem Fenster	ENHG	togetherness	
225	3483. / , das seine Fraw gar vnredtlich vnd vergeßlich gehandelt hette / , dann sie mit einem losen Buben entlauffen were / (.) sein Bruder aber wuste die Sachen anders /	ENHG	togetherness	
226	660. / (.) welche aber zu zwoelff gulden bestimbte besoldung haben / , mueessen alle zeit mit jren pferdtn auf Jegclichs gepot gerecht sein / , auf jren aignen Chosten / (.)	ENHG	togetherness	accessory
227	2295. zuo dall / vnd hieb dem pferd den hals ab , also , das Oliuier mit seinem pferd fiele / (.) er stund vff sein fueß / , aber es war	ENHG	togetherness	concurrence

TOGETHERNESS	Example	Language	Frame 1	Frame 2
228	817. , weiln sie allein auff das Judenthumb gehn . (.) Eben so wenig gewinnt er mit dem kleinen Haeuffle / , davon Christus redet , Luc . 12 . (.) Dann	ENHG	togetherness	instrument
229	452. , ist , das du dych verpergen sollt vntter den schaten der pleter , die mit dysser plune her and prosen (.) eya wen dyr hays ist von der hycz der	ENHG	togetherness	concurrence
230	805. fromb vnd rein in der Lehr / als jhr seyt / (.) so ist er mit ewerer Succession auch nicht allzeit so richtig hergangen / , wie jhr rhuemet . (.)	ENHG	togetherness	
231	618. Ludwigs zu Hungern vnd Poln Tochter / (.) Der aber vber kam das Kuenigreich Poln mit seiner Praut im 1383 . Jar . (.) SWATOPOLCH , der das Fuerstenthumb zu Khiow	ENHG	togetherness	collaboration
232	1264. sibental nidren , mit der hoebtbaner , zwen wisß turnne , **mit** c Rossen geladen mit spis , nat{3} marie xlv (.) Jten sexa p{5} nat{3} marie komend die von obren	ENHG	accessory	togetherness
233	831. es ein andern bescheid / , dieweil damahlen auß Gottes sonderbahrem außtrucklichem befelch der Messias mit seinen Guthaten durch allerley Bilder vnd Schatten muessen fuer gebildet werden / , Hebr .	ENHG	attribute	togetherness
234	616. muegen / , dann so bewegt da BLVD seinen Herren / , Er soll sich mit seinem Brueeder / , der vil sterckher dan er war / , befriden / vnd	ENHG	instrument	togetherness
235	815. Egypten / , Jndia / vnd so vielen maechtigen Jnsulen / , darinn der Mahomet mit seim Alcoran regirt ? (?) Nun Europa wird gemeiniglich in zehen Provincias oder Koenigreich ab	ENHG	instrument	togetherness
236	Erst Waren es nur wenige, die Ältesten der protestantischen Gemeinde von Bitias mit ihren Frauen.	NHG	togetherness	
237	Das Blut, das seinen Weg durch den Körper zurücklegt und dadurch eine Menge Abfallprodukte des Stoffwechsels mit sich führt, gibt seine Kohlensäure an die Lunge ab, die sie ausatmet.	NHG	togetherness	

TOGETHERNESS	Example	Language	Frame 1	Frame 2
238	Dann nehmen wir einfach einen Schwimmer, zwingen ihn, einen elektrischen Drehwiderstand zu betätigen, und schalten diesen Widerstand so mit einer Stromquelle und einem Amperemeter zusammen, daß der eingeschaltete Teil des Widerstandes um so größer wird, je tiefer der Schwimmer sinkt.	NHG	togetherness	
239	Diese führen in einen ausgedehnten, den Kiemensack umgebenden sogenannten Peribranchialraum, der durch die zweite der Öffnungen am Ende des Tieres, die Kloakenöffnung, mit der Außenwelt in Verbindung steht.	NHG	togetherness	
240	Während der Baal Besitzer und Inhaber eines Ortes ist, wandert Jwh mit den Stämmen in der Wüste umher.	NHG	togetherness	
241	Auch mit ihm verbrachte ich viel Zeit in anregenden Gesprächen.	NHG	togetherness	
242	Wollen Sie nicht auch mit aufs Feld hinaus?" fragte der Verwalter.	NHG	togetherness	
243	Es werde ihm vorgeworfen, zusammen mit dem bereits verhafteten Paul Conrad (siehe vorstehend Abschnitt 1) den ebenfalls verhafteten Oberst Martin vom Verteidigungsministerium (siehe 10270 D/3) dem "Spiegel" als Geheimnisträger zugeführt zu haben.	NHG	togetherness	
244	Die Grießschmarren entweder mit Kompott oder frischem Salat auftragen.	NHG	togetherness	
245	Mendoza **mit** der Duenna, Antonio mit Luisa und Ferdinand mit Clara. -	NHG	togetherness	
246	Er geht **mit** mir spazieren, er geht mit mir aus.	NHG	togetherness	
247	Selbstverständlich kannst du auch zu Hause, mit weniger Kindern, Fasching feiern.	NHG	togetherness	
248	Er ist bereit, für sein Vaterland alles zu opfern, und sollte man seinen Herzog stürzen, so wolle er als Bettlerr mit ihm durch die deutschen Lande ziehen und die deutsche Schmach dem Volke verkünden!	NHG	togetherness	
249	Nach Tisch holte ich meinen Freund Otto Neumann ab, um mit ihm einen Lindenbummel zu machen; denn dort, wo das Herz der kaiserlichen Residenz am lautesten	NHG	togetherness	

TOGETHERNESS	Example	Language	Frame 1	Frame 2
	schlug, konnte man den geheimen Gang der Weltgeschichte am ehesten belauschen.			
250	**Mit** dem Eis in ein großes Limonadenglas füllen - mit Früchtchen garnieren.	NHG	togetherness	
251	Texy macht mir viel Freude, man kann **mit** ihr spazierengehen, sie ist immer fröhlich mit von der Partie.	NHG	togetherness	
252	Ich bin **mit** Fräulein Alma kaum hundert Schritt weit über die Straße gegangen - habe kaum zehn Worte mit ihr geredet.	NHG	togetherness	
253	Die Mechanik der beweglichen Zunge ist folgende: die kurze, dicke und kolbenförmige Zunge ist vermittels einer Scheide mit dem Zungenbein verbunden.	NHG	togetherness	
254	Sie kommt mit den Braunschweigern.	NHG	togetherness	
255	Er, mit noch ein paar andern, überlebte die Leichen, strolchte sich bettelnd durch zu einem andern Hafen und kam über ein andres Totenschiff, wo er infolge einer gräßlichen Schlägerei abkanten mußte, auf die Yorikke.	NHG	togetherness	
256	Das Darlehen besitzt eine Laufzeit von 25 Jahren und wird mit 5 3/4 v. H. verzinst; seine Tilgung beginnt am 15. November 1964 (siehe letzte Anleihe: 7828 H).	NHG	togetherness	
257	Daß dieser Mann **mit** seinem jüdischen Anhang seit Jahren mit den gleichen Mitteln gegen Japan kämpft, ist uns bekannt.	NHG	togetherness	
258	Wenn ein Affe eine außer Reichweite liegende Frucht an dem an ihr befestigten Faden ohne Probieren oder vorherige Erfahrung zu sich heranzieht (primäre Aufgabenlösung), so muß er "verstanden" haben, daß die Frucht mit dem Faden zusammenhängt und daß Ziehen am Faden das erstrebte Ziel in Reichweite bringt.	NHG	togetherness	

TOGETHERNESS	Example	Language	Frame 1	Frame 2
259	Die VO über die weitere Vervollkommnung der WR. auf der Grundlage des Plans vom 28.1.1982 (GBl. I, S. 85) tendiert dagegen wieder auf eine Betonung des direkten Zusammenhangs von WR. und Plan, was dem für das Wirtschaftssystem der DDR typischen Wechselspiel von Zentralisation - Dezentralisation und Rezentralisation entspricht und mit einer Verschärfung der Kontrollmechanismen einen neuerlichen Machtzuwachs der zentralen Staatsorgane im ökonomischen Bereich signalisiert.	NHG	togetherness	
260	Wenn man weiß, daß alle Urteile auf vorher festgelegten Kategorisierungen, also auf Vor-Urteilen beruhen, muß die Vorurteilsforschung sich als Forschung über sich selbst erkennen; sie kommt mit ihren eigenen Vor-Urteilen (oder Vorurteilen?) in ihrem eigenen Gegenstandsbereich vor; sie kann, und muß, die Grenze zwischen normalen und kritisierbaren (aufklärbaren, wegtherapierbaren) Vorurteilen an sich selbst testen.	NHG	togetherness	concurrence

TOPIC	Example	Language	Frame 1	Frame 2
1	quadun imo sine iungoron : oba so ist mannes sacha mit uuibe , thanne n ist biderbi zi gihiuuenne . Her	OHG	topic	
2	840. zu bekraefftigen / , als die Predig / , die er im Schiff gehalten / **mit** einem wunderbarlichen Fischfang / , Luc . 5 . , die er auff dem Berg gehalten / mit Reinigung deß Aussaetzigen / , Matth . 7 . , die er im Hauß gehalten	ENHG	topic	
3	841. zu bekraefftigen / , als die Predig / , die er im Schiff gehalten / mit einem wunderbarlichen Fischfang / , Luc . 5 . , die er auff dem Berg gehalten / **mit** Reinigung deß Aussaetzigen / , Matth . 7 . , die er im Hauß gehalten	ENHG	topic	
4	842. deß Aussaetzigen / , Matth . 7 . , die er im Hauß gehalten / mit Auffrichtung deß Gichtbruechigen / , Luc . 5 . , vnd andere . (.) Nicht	ENHG	topic	
5	"Du weißt also nicht die dumme Geschichte mit dem See", sagt sie beklommen.	NHG	topic	
6	Wir meinen, daß man die Arbeit mit verdichtenden Formen weder als formalistischen Eskapismus abqualifizieren noch als klassenspezifische Realitätsuntüchtigkeit erklären kann, sondern als den Versuch sehen muß, dem eigenen Repertoire Formen abzugewinnen, die sich unter den Bedingungen der Zensur zur Reflexion von Geschichte eigneten.	NHG	topic	
7	Am Donnerstag. 15. November, 17 Uhr, beginnt Elisabeth v. Schmidt-Pauli in der Universität, Hörsaal 218, ihren Vortragszyklus über " Rainer Maria Rilkes Weltbild " mit dem Thema: " Der Dichter und das Wort der Erde ".	NHG	topic	

APPENDIX B: QUICK REFERENCE FRAME-TO-FRAME RELATIONS

The table below serves as a quick reference guide to the relationships between the frames proposed in this work. Each frame is listed alphabetically under the heading "Frame 1".

FRAME 1	**Relationship**	**Frame 2**
ACCESSORY	inherits from	TOGETHERNESS
AFFLICTION	inherits with negative perspective from	POSSESSION
AGENTIVE	inherits from	MEANS
AGREEMENT	inherits from	COLLABORATION
AMALGAMATION	is inchoative of	TOGETHERNESS
ATTRIBUTE	inherits from	ACCESSORY
CAUSE	is resultative of	MEANS
CIRCUMSTANCE	inherits from	CONCURRENCE
COLLABORATION	inherits from	RECIPROCAL_CONCOMITANCE
COMMUNICATION_EXCHANGE	inherits from	COLLABORATION
CONCURRENCE	inherits from	TEMPORAL_CONCOMITANCE
CONNECTION	inherits from	AMALGAMATION
CONTAINMENT	inherits from	LOCATIVE_CONCOMITANCE
DIRECTIONALITY	inherits from	LOCATIVE_CONCOMITANCE
INSTRUMENT	inherits from	INSTRUMENTAL_CONCOMITANCE
INSTRUMENTAL_CONCOMITANCE	inherits from	CONCOMITANCE
LOCATIVE_CONCOMITANCE	inherits from	CONCOMITANCE
MANNER	is metaphor of	INSTRUMENTAL_CONCOMITANCE
MATERIAL	inherits from	INSTRUMENT
MEANS	inherits from	INSTRUMENTAL_CONCOMITANCE
OPPOSITION	negative perspective on	AGREEMENT
PARTITIVE	inherits from	ACCESSORY
POSSESSION	inherits from	ATTRIBUTE
PROVISION	is inchoative of	POSSESSION
RECIPROCAL_CONCOMITANCE	inherits from	CONCOMITANCE
TEMPORAL_CONCOMITANCE	inherits from	CONCOMITANCE
TEMPORAL_DIRECTIONALITY	is metaphor of	DIRECTIONALITY

FRAME 1	Relationship	Frame 2
TOGETHERNESS	inherits from	LOCATIVE_CONCOMITANCE
TOPIC	is metaphor of	CONTAINMENT