Tracing the Evolution of the German Language and German Prepositions
through an Interdisciplinary Approach
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Abstract

The evolution of the German language is incredibly complex. Changes in the language have occurred due to the influence of other cultures and languages in close physical proximity to it, as well as shifts in power. Particularly with regards to the influence of power dynamics on the language over the course of its history, power has shifted from group to group, and often even from one realm of German society (e.g. religion, culture, politics) to another. Moreover, what scholars call today the historical political fragmentation of the German-speaking regions, as well as the perceived need for their unification, has led to the eventual creation of a German nation-state. In my thesis, I took an interdisciplinary approach to examine these such factors, as understanding them helped me to trace the evolution of the written German language. Through a humanities-based approach, I examined the works produced by different literary movements, prominent literary figures, and any others who had substantial religious, cultural, or political power. The respective prescriptive and/or descriptive natures of these works shaped the language over time. The linguistics-based approach informed the humanities-based approach to understanding the evolution of the German language, by providing a quantitative measure of how German prepositions have evolved. Specifically, the study on German prepositions attempted to answer the question: have uses of German prepositions become less spatial (i.e. more non-spatial) over time? The prediction was that uses of German prepositions have become less spatial over time. However, contrary to the prediction, when all of the samples containing *durch, bei,* and *an* were analyzed together, year of use of the prepositions was not a significant predictor of the likelihood of their type of use. When the prepositions were examined independently, though, the results varied. For *durch,* year of use was not a significant predictor of the likelihood of its type of use, though the model suggested that uses of *durch* tended to be less spatial over time. For *bei,* year of use was a significant predictor of the likelihood of its becoming less spatial over time, and for *an*, the effect was reversed. The humanities-based approach helped to explain these unexpected results from the linguistics-based approach, while the linguistics-based approach determined the extent to which the conclusions drawn in the humanities-based approach held true. The humanities-based approach informed the linguistics-based approach, and vice versa, in the examination of the texts that shaped the German language over time.

1.0 Introduction

Language, whether spoken or written, is fundamental to how people characterize, describe, and therefore, understand the world. Written language, in particular, is as much a tool for communicating this understanding, as it is a record of how, over time, people have changed the ways in which they communicate. In order to measure such changes, scholars may take note of any differences that have occurred in the vocabulary of, as well as the manner and form taken on by, a language. These changes also may serve as evidence for the occurrence of any important events over the course of a language's evolution. In particular, a study on the evolution of the German language, with regards to these features found in it, may lead to intriguing findings. Since its earliest known origin in Proto Germanic (ca. 500 BC), many changes have occurred in the German language. These changes have been due to the influence of other cultures and languages in close physical proximity to it, as well as shifts in power, emerging technologies, and more deliberate efforts to characterize or shape it. Particularly with regards to the influence of power dynamics on the language over the course of its history, power has shifted from group to group, and often even from one realm of German society (e.g. religion, culture, politics) to another. Moreover, what scholars call today the historical political fragmentation of the German-speaking regions, as well as the perceived need for their unification, has led to the eventual creation of a German nation-state. Through an examination of these different factors, the extent to which they shaped the language, as well as the extent to which the language in turn worked to influence them, will be revealed.

It is thus that in my thesis, in order to trace the evolution of the written German language over time,[1] I am writing about the works produced by different literary movements, prominent literary figures, and any others who had substantial religious, cultural, or political power. Because of the prescriptive and/or descriptive natures of these works,[2] they shaped the language into what it is today. To this same end, I also am conducting a statistical analysis of the evolution of German prepositions. This will provide a quantitative measure for any changes that occurred in the language. The importance of taking an interdisciplinary approach to this endeavor, of tracing the evolution of the German language, cannot be overemphasized. Different disciplines— the humanities and the social sciences, in particular—employ different methods to study the development of the German language over time. On the one hand, humanists take a more qualitative approach, by characterizing works produced by prominent literary figures or important literary movements. On the other hand, linguists take a more quantitative approach, by conducting statistical analyses to measure any changes that occurred in the language. While these approaches may be different, though, it is important to remember that their ultimate goal remains much the same: to understand how the German language has developed into what it is today. As such, it should not come as a surprise that the findings from both approaches may complement each other when compared. For example, the humanities-based approach may help to explain any unexpected results from the linguistics-based approach, while the linguistics-based approach

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[1] It should be understood that unless otherwise specified, the discussions found in my thesis are with regards to the *written* German language. My study on the evolution of the German language was made possible only because of the existence of primary and secondary source material that existed in the written medium and that also captured changes that occurred in the language.

[2] The decision to employ the terms "prescriptive" and "descriptive" came from inspiration drawn from an interview with *Sprachgesellschaften* expect Karl Otto (Otto, personal interview). Writers of prescriptive works attempted to shape the German language into a form that they thought was the most "appropriate" or "proper," whereas writers of descriptive works attempted to define or follow any rules that they already thought governed the language.

may determine the extent to which the conclusions drawn in the humanities-based approach hold true. The approach to my thesis is therefore two-pronged. The humanities-based approach will inform the linguistics-based approach, and vice versa, in the examination of the texts that shaped the German language over time. The outcome will be an understanding of the evolution of the German language that as holistic as possible.

In the first section, titled "An Overview of the Evolution of the German Language," I am taking a humanities-based approach to trace the evolution of the German language. Different literary movements, prominent literary figures, and any others who had substantial religious, cultural, or political power throughout the history of the language helped to direct its evolution. Some major social, political, and cultural changes that occurred in the German-speaking regions also influenced the motivations behind the writing of the texts. The writing of these texts, in turn, helped to bring about some of the changes that occurred in German society. As these texts directed the evolution of the German language in different ways, much of the discussion on them will involve an examination of their respective prescriptive and/or descriptive natures. As mentioned before, on the one hand, writers of prescriptive works attempted to shape the German language into a form that they thought was the most "appropriate" or "proper." When successful, they introduced changes to the vocabulary of, or the manner and form taken on by, the language, that may not have occurred otherwise. On the other hand, writers of descriptive works attempted to define or follow any rules that they already thought governed the language. When they were successful, the rules that they thought governed the language persisted more strongly over time in the language than would have been the case otherwise. The importance of making this distinction between the different works, with respect to their prescriptive and/or descriptive natures, cannot be overemphasized. It is a means to characterizing the motives of the authors,

and therefore, a means to gauging the extent to which they were successful in their endeavors. In sum, the first section will serve to achieve a broader understanding of the long-term impact of these works on the evolution of the German language.

In the second section, titled "A Statistical Analysis of the Evolution of German Prepositions," I am taking a linguistics-based approach to trace the evolution of the German language. Its purpose is two-fold: 1) it will inform the humanities-based approach to understanding the evolution of the German language, by providing a quantitative measure of how German prepositions have evolved, and 2) it will be a follow-up to an earlier study conducted by Jamrozik, et al. on the evolution of English prepositions. As in the English language, prepositions in the German language are a fundamental part of speech. They name relationships between two or more items, which can be people, places, things, ideas, or concepts. A study on prepositions therefore can help to broaden the existing knowledge of the different ways in which language may be used to characterize and describe the world. In particular, an analysis of the *evolution* of prepositions may provide insight into how, over time, the function of prepositions in language, and therefore, their contributions to people's ability to characterize and describe the world, have changed. The earlier work by Jamrozik, et al. found that spatial uses of English prepositions emerged about 200 years before non-spatial uses. The study on German prepositions attempts to answer a similar question: have uses of German prepositions become less spatial (i.e. more non-spatial) over time? While the prediction is that uses of German prepositions have become less spatial over time, the findings from the study on German prepositions are only partially consistent with the findings from the study on English ones. The results indicated that overall, when the three German prepositions are analyzed together, year of use is not a strong predictor of the likelihood of spatial (vs. non-spatial) use. However, when the prepositions are

examined independently, the results vary. An attempt will be made to explain the variation in these results, by applying the conclusions drawn in the first section that used a humanities-based approach.

2.0 An Overview of the Evolution of the German Language

2.1 Background

A substantial amount of work has been done by scholars on the history of the German language. However, less has been done to examine the extent to which any specific event, literary movement, text, or body of texts has directed the *evolution* of the German language into what it is today. Therefore, in this section, I am using a humanities-based approach to write about the works produced by different literary movements, prominent literary figures, and any others who had substantial religious, cultural, or political power throughout the history of the German language. Because of their prescriptive and/or descriptive natures, they helped to direct the evolution of the German language. This is in order to fulfill the need to examine more closely the long-term impact of these works on the evolution of the German language.

This section starts with a consideration of the earliest known origin of the modern-day German language, the Proto Germanic language, which arose around 500 BC. This section ends with an examination of German texts written in the late 19th century. Focus is placed on the three following time periods: *Althochdeutsch* ("Old High German," henceforth referred to as *AHD*; 750 AD–1050 AD), *Mittelhochdeutsch* ("Middle High German," henceforth referred to as *MHD*; 1050 AD–1350 AD), and *Neuhochdeutsch* ("New High German," henceforth referred to as *NHD*; 1350 AD–). The *AHD* works of interest are translations of Latin religious texts written by monks and clerics, while the *MHD* works of interest are the poetry written by courtly society. The *NHD* works of interest include legal documents written by the courts, Luther's Bible, translations and grammars written by the *Sprachgesellschaften* ("German language societies"), grammars and dictionaries written after the decline of the *Sprachgesellschaften* (the Brothers Grimm *Wörterbuch*, in particular), and works produced by Goethe and Schiller.

Not all scholars agree on which works are the most worthwhile for study. As such, the texts selected for study include not only ones that are widely accepted as having transformed the German language in a meaningful way (e.g. Luther's Bible), but also those that are more disputed (e.g. translations and grammars written by the *Sprachgesellschaften*). Some major social, political, and cultural changes that occurred in the German-speaking regions (e.g. the Thirty Years' War) are addressed as well. They influenced some of the motivations behind the writing of these texts. Likewise, the writing of these texts helped to bring about some of the changes that occurred in German society.

Some limitations to the humanities-based approach should be acknowledged. First, some generalizations will have to be made about the different bodies of texts. This will make it possible to understand how the different texts, when taken together, directed the evolution of the German language. However, making these generalizations also will come with the risk of diminishing the writers' subtle yet important differences in goals. Moreover, the assumption will be made that texts, to a significant enough extent, directed the evolution of the German language. However, it is recognized that for much of the history of the German language, only an elite few that had power (whether religiously, culturally, or politically) were able to read and write. As such, it is possible and even quite likely that the German texts selected for study are not entirely reflective of the language spoken by the majority of the German-speaking population. These such limitations to the humanities-based approach exist, but that is not to say that it will not be fruitful. This approach makes it possible to determine whether or not the texts selected for study are prescriptive and/or descriptive in nature, and therefore, this approach makes it possible to determine the extent to which they were able to direct the evolution of the German language.

Overall, this section is an honest attempt to shed more light on the long-term impact of these works.

2.2 From Proto Germanic (ca. 500 BC) to the Influence of Roman Culture, Christianity, and Latin on German

Scholars have traced the origins of the German language back to Proto Germanic of the Proto-Indo European (PIE) languages, which arose about 500 years before the birth of Christ (Mallory and Adams 24). It was a family of languages entirely spoken and not written by the Germanic peoples, who lived in northern Europe (Algeo 57, 81). They were able to communicate about complex relationships both inside and outside the family: "their society was a stratified one, with a warrior nobility and a common laboring class" (Algeo 57). They also were able to communicate about agriculture, metals, ceramics, wheeled transport, and gods (Algeo 57, 81; Chambers and Wilkie 30; Mallory and Adams 443). It is important to note that while the differences between Proto Germanic and the other PIE languages of the time mainly were with regards to vocabulary, verb formation, pronunciation, and stresses on syllables, that is not to say that Proto Germanic was at all uniform (Algeo 81; Lockwood 2). Before the Germanic peoples spread out over Europe and into Asia, already the dialectal nature of Proto Germanic had developed (Algeo 55; Strong 49). It is thus that the different ways in which the language could be spoken were further diversified. Even in the earliest stages of its development, the German language was never a standard, unifying one.

With the emergence of runic writing, the Proto Germanic language was no longer only spoken (Salmons 95). It is unclear when exactly runic writing first emerged, but scholars have estimated that it was around the birth of Christ (Bammesberger 6). It was also around this time that the First Sound Shift (Grimm's Law) and Verner's Law came into effect and became more

widespread over Proto Germanic-speaking regions: the former "rendered the PIE voiceless stops into voiceless fricatives," and the latter resulted in "voiceless fricatives [becoming] voiced when they were in a voiced environment, and the Indo-European stress was not on the immediately preceding syllable" (Algeo 81; Fortson 302). The different variations of the Proto Germanic language that ultimately came out of this period have been grouped in the following way: Northern Germanic (Norse, Runic), East Germanic (Gothic), and West Germanic (Dutch, English, German) (Algeo 82; Mallory and Adams 24). The Second Sound Shift, which began approximately in the fifth century AD and ended in the eighth century AD, entailed the affrication of voiceless stops (the distinction made between *Plattdeutsch* and *Hochdeutsch* today has been attributed to it) (Fortson 323; Vennemann 271). These such descriptions of changes to the Proto Germanic language and subsequent Germanic languages may seem very technical in nature, but it is nonetheless important to acknowledge that the changes were not the outcome of any deliberate attempt to bring them about. This is very much in contrast to the literary movements that took place starting with *AHD*, which involved deliberate attempts to put the German language on an evolutionary path that would make it more standard and unifying. Moreover, while the aforementioned changes impacted the Proto Germanic language and subsequent Germanic languages as a whole, it was hardly the case that the speakers of these languages lived locally to each other. As mentioned before, the Germanic peoples had spread out, and their expansion was so great that scholars have characterized it in the following way: "the whole Germanic world seems to have been in fairly constant turmoil, whole tribes and confederations of tribes moving very long distances at remarkable speed" (Algeo 55; Chambers and Wilkie 49; Strong 49). It is thus that the languages spoken by the Germanic peoples

underwent significant changes that were similar in nature (i.e. the sound shifts), even though they were beginning to spread out.

Before the development of *AHD* is outlined, the influence and power of the Roman culture (specifically, with regards to Latin and Christianity) over the German-speaking peoples should be examined more closely. It was the result of the contact between the Romans and German-speaking peoples, which, in turn, was made possible by their physical proximity. A number of mercenaries in and leaders of the Roman army had come from these German-speaking peoples, and the civilized nature of Roman culture appealed greatly to them (Green 202). It was as though these individuals thought that adopting Roman cultural values would help them to achieve the political stability they saw lacking in the German-speaking groups from which they had come. The influence of Latin went hand-in-hand with the influence of Roman life on these individuals, who then passed on these aspects of Roman culture to their respective groups (Green 202). Moreover, as early as in the fourth century AD, the German-speaking peoples that made contact with the Roman culture, by migrating across lands occupied by the Roman Empire, converted to Christianity as quickly as within one generation's time (Green 273). The influence of Roman culture therefore could be seen in the effect that it had on the spiritual life of the German-speaking peoples.

Both quantitative and qualitative evidence exists for the extent to which Roman culture influenced the languages spoken by the Germanic peoples. Loan words allow for a more quantitative measure: "about 350 early Latin loanwords have been established for Germanic" (Green 202). However, without any standard to which this number can be compared, it is difficult to gauge the extent to which Roman culture shaped the languages spoken by the Germanic peoples. It is thus that descriptions of the influence of Latin are able to compensate for

the lack of insight revealed by the quantitative data, and therefore, they can speak to larger

developmental changes that occurred in the German language. Jankowsky provides quite a vivid

mental image of the influence of Latin:

> "Prior to the 19th century, the regional languages of Europe in general, and the languages of Germany in particular, were at no time a viable rival for the pervading force of the Latin language, and the fragmented German law, adapted from various Germanic sources, could not hold its own against the highly sophisticated codices of the Roman Law which had grown to a level of high perfection in conjunction with the development of a grandiose civilization" (1163).

Latin therefore was the standard language not only in the realm of religion, but also in law and

even academia (Chambers and Wilkie 53). Because Latin pervaded other aspects of Roman

civilization that were vital to its infrastructure, these other aforementioned aspects of Roman

civilization were looked to by the Germanic peoples as examples of what civilization could be

for them. This ultimately was conducive to the influence of Latin becoming firmly fixed in the

German language.

2.3 *Althochdeutsch* (750 AD–1050 AD)

By the time the *AHD* period arose, no standard, unifying German language existed.

"*Althochdeutsch*" is the term, then, used to describe the different dialects that existed in the

German-speaking regions during this period, these dialects having been as varied as the groups

of people and clusters of monastics living there (Chambers and Wilkie 59). One would be

mistaken to identify this or that dialect as being representative of all of *AHD*, as no single dialect

from that period possibly could represent all of the nuances and subtleties of its *AHD*

counterparts. While modern-day German is often compared to the written *AHD* East Franconian

dialect, this should be regarded as mere convention (Lockwood 11). It is not that any other *AHD*

dialect was any less significant in making communication possible for those who once spoke or

wrote it. Often times, a dialect designated as a "standard" for the language rose to prominence

precisely because it was used by those who were in either religious, cultural, or political power, and who were able to maintain this power. Super writes: "In order that a certain type of speech may gain the ascendency over another, or over every other, it must be supported by some generally recognized authority, and this authority must be sufficiently continuous to produce a permanent impression," (80) but he asserts that this was not found in the German-speaking regions until 1325 AD. However, the impact of the work by monks and clerics on *AHD*, though, suggests that the influence of power dynamics on the German language existed much earlier than asserted by Super.

Because most of the German-speaking population was illiterate, the medium that would have made the standardization of the language possible (i.e. writing) was accessible only to a privileged minority: the monks and clerics. Written *AHD*, therefore, was very much "a language of monks and clerics" (Chambers and Wilkie 58). The Church was the dominant power in Europe during that time, and it viewed its role in the area as being two-fold: 1) converting as many people as possible to Christianity, and 2) guiding the monks and clerics in this endeavor (Chambers and Wilkie 58). The bulk of the earliest *AHD* works thus were religious in content (Lockwood 9).[3] They were mainly glosses and translations from the Latin into German (Lockwood 9). This understood, one may be prompted to ask why it was not the case that a standard, unifying written language did not come about with these translations, as had happened when Luther translated the Bible approximately 700 years later. Given the Church's priorities at the time, it was instead the case that the clergy sought to translate the Latin texts into a form of German that would be most conducive to the conversion of the pagan groups to Christianity. This meant that the German texts were written in a form for the clergy, first and foremost, to

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[3] While *Das Hildebrandslied* and *Die Merseberger Zaubersprüche* have been dated to the mid-eighth century, they have fewer than 80 lines (Lockwood 9).

understand (Chambers and Wilkie 58). They were neither prescriptive nor descriptive. Rather, they were an attempt to facilitate the communication of the church texts to any members of the clergy who would have not access to them otherwise. That said, while these texts were made more accessible to other members of the clergy, this target audience still remained a privileged minority.

It is acknowledged, of course, that a standard, unifying language for all of the German-speaking regions[4] would have made it easier for the Church to communicate with the majority of the German-speaking population. That most German speakers at the time could not read and did not have access to any religious texts certainly meant that the clergy had much more power. However, the conditions that would have made the acceptance of any language as standard or unifying even possible were unavailable at the time (e.g. the availability of a medium, such as writing, to set the standard, which is made possible by printing; literacy, which is made possible by education). As such, the safer bet was for the clergy to translate the texts into another form (i.e. a dialectal form) that could be circulated among and easily understood by their peers, who then could pass the meaning on to the pagan groups. It is worth mentioning that local written standards set by the clergy did arise, but their impact on the evolution of their respective dialects were minimal. They were outpaced by the changes in the spoken dialects (Lockwood 11). This topic of the interplay between the written and spoken forms of the dialects will be revisited in the coming pages. For now, the impact of power dynamics on the evolution of these dialects will be discussed.

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[4] It is worth emphasizing that before the German states united under Otto von Bismarck to form the German nation-state in 1871, a conglomerate of principalities that were governed locally existed (Hardin xiv).

2.4 *Mittelhochdeutsch* (1050 AD–1350 AD)

It is widely accepted that the transition from the *AHD* period to the *MHD* period was signified by the change in the vowel sounds ("a more systematic noting of modified vowels and a reduction of most unaccented vowels to either a neutral *e* sound (like the *e* in *Glaube*) or to a vanishing point") (Chambers and Wilkie 61). Nonetheless, this transition also may be characterized by the growth of influence on German dialects by different groups who rose to prominence during this time. The Church still was a dominant force in Europe, but as German society became more urbanized, different families (e.g. the Conradine and Bolanden families) rose to political power (Bachrach 22, 136; Chambers and Wilkie 64). The need grew for merchants and artisans alike to communicate more effectively through writing (Chambers and Wilkie 64). It was the members of courtly society, though, that contributed most to the body of *MHD* texts studied by scholars today.

The members of courtly society in the *MHD* period, like the monks and clerics who translated religious texts into German from Latin in the *AHD* period, concerned themselves mostly with writing infused with deep religious meaning (Lockwood 57). Their writing was in the form of poetry, both epic and romance, the latter of which is called *Minnesang* (Lee 560; Lockwood 57). Therefore, as with the *AHD* writing by the monks and clerics, the writing by the members of courtly society was hardly reflective of the dialects spoken by the majority of the German-speaking population during that period. However, in contrast to the *AHD* writing by the monks and clerics, the *MHD* writing by the members of courtly society was much more uniform throughout the German-speaking regions (Lockwood 57). Because they met often, it is very likely that not only the written but also the spoken language of their class was fairly uniform

(Lockwood 57). Perhaps this written language by the cultural elite was even more standardized than any other German dialect, written or spoken, had ever been.

An overview of the content of these texts, as well as the backgrounds of those who wrote them, reveals that they were descriptive in nature. These texts should be studied in the context of their role in medieval German oral tradition, as "writers were typically aristocrats bound in service to a greater noble and writing under under his patronage. They were performed orally, providing entertainment and instruction through an idealized fusion of Christian and chivalric principles" (Lee 560). *Tristan* (1210) by Gottfried von Strassburg (who died ca. 1210) and *The Nibelungenlied* (whose author is unknown) are two of the more prominent texts. A consideration of the work by Wolfram von Eschenbach (1170 AD–1220 AD) in particular, though, would be particularly relevant here, as his background as a knight and writer of *Minnesänge* makes his work more representative of the texts written during this period (Lee 560; Nakajima 14). In perhaps his most renowned work, *Parzival*, a hero explores the importance of religious values in knighthood (Lee 560). Scholars often refer to Eschenbach as a "vernacular writer" of this period (Classen 71), and so his work may be classified as descriptive. That said, many of his contemporaries had a deep admiration for him and looked to his work for inspiration (Classen 72). It is therefore likely that to some extent, his work was regarded as prescriptive.

It is important to realize that many texts of this period were not necessarily written down by those who thought of them. Some writers of the *Minnesänge* were illiterate, which meant the *Minnesänge* were composed orally but then written down at a later time (Oberlin 39). As such, the *Minnesänge* were descriptive to the extent that oral tradition captures the vernacular. It should be noted that "*Minnesang* is staged, a performance akin to theater in which the singer plays a role rather than represents himself, though it is possible that in the function of wooing the

role is indeed a mask for personal desires" (Oberlin 177). In this sense, it is possible that they were regarded as prescriptive. The idiosyncrasies of the vernacular captured by them may have been reinforced and perpetuated, more so than any idiosyncrasies that were not included in these texts.

2.5 *Neuhochdeutsch* (1350 AD–)

Once the change in vowel sounds spread throughout all of the German-speaking regions, the *MHD* period had come to an end, and the *NHD* period had begun (Lockwood 88). By the time *NHD* arose, all of the elements in speech and writing that exist in the modern-day German language were in existence (Salmons 231). That is not to say that *NHD* was in its earliest stages a standard, unifying language. Like the language spoken by the majority of the German-speaking population, the writing around this period was dialectal (Aschenberg 707). The body of texts written during the first few centuries of this period also became increasingly varied in content. This was due in large part to the historical changes that occurred in German society during this time. These historical changes made it possible for the texts written during the earlier part of the *NHD* period to become increasingly diverse and more accessible to a greater portion of the German-speaking population.

The bulk of the earliest texts from the *NHD* period were the legal documents written by the "administrative units" of the courts, which had been produced as early as the *AHD* period (Salmons 267). Because the bureaucrats were encouraged to write in the vernacular (specifically, the language spoken in the greater region), these documents were more accessible to a greater portion of the German-speaking population (Waterman 115). One result was that the language written by the bureaucrats even shaped the language of the local merchants and middle class (Salmons 267). The Hanseatic League, whose work contributed to the flourishing of trade in the

northern German-speaking regions, wrote trade laws that also were accessible to the merchant

class (Steeves 470; Trebilcock). It is thus that the accessibility of the language in more official

documents to more of the German-speaking population resulted in its greater potential to

influence their written and spoken language in subtle ways.

It thus can be argued that the language written by the bureaucrats was more descriptive

than prescriptive in nature. The bureaucrats sought to capture the language spoken by everyone

else in the region. However, that is not to say that it was not prescriptive to some extent. While

the bureaucrats were not intentional about influencing the language of the lower classes in

society, it is inarguable that they managed to do so. It is important to note the impact of their

relative power in this discussion. The bureaucrats of the administrative units had ties to the

royalty, and so their documents, when released to the public, came from a place of authority

(Salmons 267). If the merchants and middle class were to look for a piece of writing that could

serve as an example for their own language, then the official documents by the bureaucrats

would be the natural choice.

Understanding that the written forms of the language influenced the spoken forms and

vice versa, it is hardly a surprise that the different dialects became more uniform over time

(Waterman 115). Contributing further to this uniformity were the major historical changes that

occurred in German society over the course of the next several centuries. More and more

German speakers were moving from the countryside into the cities, such that the interactions

between their respective dialects eventually resulted in the creation of newer urban ones

(Salmons 271). It was Gutenberg's invention of the printing press in 1450, though, that was the

greatest driving force behind these different dialects' movement towards greater uniformity

(Chambers and Wilkie 55). For the most part, the printers looked to the language of the local

court as an example for their *Druckersprache*, but ultimately, it was up to them to interpret their vernacular to provide the written language a form (Salmons 269; Waterman 128). Despite the contribution of these printers to the increased uniformity of the dialects, however, it should be emphasized that the *Druckersprachen* were hardly responsible for the creation of a standard, unifying language for all of the German-speaking regions. In fact, it was far from the case, as Aschenberg writes: "the different regional written varieties were increasingly fixed by the printers" (Aschenberg). As such, while the dissemination of the texts was made possible by the printers, they worked only to reinforce any dominant and possibly idiosyncratic features that already existed in the vernaculars.

A little less than a century after Gutenberg invented the printing press, Luther finished his translation of the Bible from Latin into German. It was profound in its influence as a canonical German text: "One-third of all publications in Germany between 1518 and 1523 bears Luther's name" (Lockwood 112). While Luther is often referred to as "the father of the German language" (Chambers and Wilkie 70), it should be understood that his primary goal was not to promote a standard, unifying German language for its own sake. Instead, while it is inarguable that his long-lasting impact on the language was making it more uniform for all of the German-speaking regions, this was only a means to an end: his primary goal was to promote a reformed approach to demonstrating the Christian faith (Chambers and Wilkie 70). This meant that presenting the Bible to the majority of the German-speaking population in a language that they could understand would have been a priority for him (Greiner 97). Because his translation was reflective of the language written and spoken at the time, he never intended for it to be prescriptive.

While Luther intended to write in such a way that speakers of both Low and High German would understand, he did look to the written language of the Saxon Chancery, *die Kanzleisprache* (its spelling and grammar in particular), as one of the bases for his *Bibeldeutsch* ("Bible German") (Chambers and Wilkie 71; Strong 81). The reason why he used the *Kanzleisprache* was because it had become more or less the standard for the imperial court, even when power had been from passed from one royal family to another (i.e. Luxembourg to Hapsburg) (Super 80). It also exerted some influence over the writing by the minor courts (Super 80). However, the *Kanzleisprache* was understood and used by only a select few, and the nobility, in communicating about private matters, nonetheless retained its use of the vernacular (Super 90). As such, it comes as no surprise that while Luther asserted that the *Kanzleisprache* was one of the bases for his *Bibeldeutsch*, he must have had to look elsewhere for inspiration, if he wanted it to be understood by those who did not belong to the courts. The vernacular of his home in East Central Germany thus served as one of his sources of inspiration (Salmons 270). Before this is discussed in further detail, though, it is important to recognize that with regards to Luther's approach to his translation of the Bible, the power of the courts still reigned supreme in influencing his *Bibeldeutsch*. It was never the case that the official documents were read by the majority of the German-speaking population. Luther likely would have known that, but perhaps he tacitly accepted that the *Kanzleisprache* had come from a place of authority, and therefore, it was a natural choice as a basis for his *Bibeldeutsch*.

When scholars recount Luther's translation of the Bible, they often concern themselves with the talent required of Luther in this prodigious feat. Luther used the vernacular of his native East Central Germany as another basis for his *Bibeldeutsch*, but it was not as though he made a

simple attempt to produce a text as close to a word-by-word translation from the Latin as possible. Chambers and Wilkie write:

> "It is rather in his artistic handling of German that he was a true creator. Among his gifts he had a remarkable feeling for the manifold variety of language and for its emotional nuances; and the richness of vocabulary, the felicity of idiom, and the vigor and directness of style which characterize all his works—Bible and hymns, catechism and sermons, expository and polemical tracts—mark a new beginning in the development of the German language" (71).

Luther's translation of the Bible, then, is reflective of not only the *vocabulary* found in the language spoken in East Central Germany at the time, but also the *form* and *manner* of speech that one could have used at the time to appeal effectively to others. That is not to say, however, that Luther was rigid in his use of his native dialect in the translation. He was able to integrate aspects of other dialects into it (Waterman 129). Without a doubt, this would have allowed for his work to appeal to those from other German-speaking regions as well, which is one reason why it was so popular with so many different German-speaking groups.

Luther's Bible therefore can be characterized as descriptive, but it also can be characterized as prescriptive. It drew from elements that already existed in the *Kanzleisprache* and the vernacular of East Central Germany, while also setting the German language on a new evolutionary path. That is not to say that his *Bibeldeutsch* was not at all a brand new German dialect. Instead, it was something of a hybrid. Luther likely never intended for it to be prescriptive, or for others to adopt it as a standard, unifying language for all of the German-speaking regions. Nevertheless, it was prescriptive to the extent that others perceived it as such, and this was made possible by a combination of different factors that have been mentioned before. Christianity had been the dominant religion in Europe for centuries, and so it comes as no surprise that the Bible, of all the texts that could have been translated into German, would have had the greatest potential for widest appeal. It also should be noted that the Bible was published

at the beginning of a new era, in which the authority of the Church was more openly questioned by the public, and so this meant Luther's Bible, in its release to the public, had greater potential for wider appeal (Arne 2). Moreover, the invention of the printing press less than a century before meant that Luther's translation could be disseminated easily throughout all of the German-speaking regions. This is evidenced by the fact that about a third of all texts were attributed to Luther, from the year 1518 to 1523 (Lockwood 112). As discussed before, the bureaucratic documents in the earlier years of the *NHD* period influenced the writing by the merchants and middle class, and this was in large part due to their writing in the vernacular. In a similar way, the accessibility of Luther's *Bibeldeutsch* to the majority of the German-speaking population made it such a profound work in the history of the German language. Its descriptive nature made it possible for those who could read German to understand it (anywhere from five to fifteen percent of the overall population) (Calder; Edwards 37). That they regarded it as prescriptive in nature opened up the possibility for it to become a standard for all of the German-speaking regions. The evidence for this was that it spread throughout and became more widely used in Low-German speaking areas (Clyne 29). The result was that Luther's *Bibeldeutsch* became the standard for most German-speaking regions.

Over the course of the 16th and 17th centuries, cities continued to grow, and the middle class took hold of more political and cultural power (Hardin xiv). The courts, though, still reigned supreme both politically and culturally, so while the middle class was able to produce its own canon of texts, it still looked to the courts for influence (Hardin xiv). Luther's translation of the Bible certainly set the German language on an evolutionary path towards more uniformity, but it was not until the Thirty Years' War (1618 AD–1648 AD) that more deliberate efforts were made by the courts to forge a standard, unifying language for all of the German-speaking regions

(Hardin xiii). The courts were struck by the devastation that had resulted because of the war, and therefore, they sought to strengthen morale again for all of the German-speaking regions. One may recall that the courtly society of the *MHD* period too had reached a certain level of uniformity in their language. However, more differences than similarities existed between them.

The Thirty Years' War was devastating to German-speaking regions: most battles had been fought on them, anywhere from one-third to two-thirds of the German-speaking population had been casualties, and the German-speaking regions no longer were as robust economically as they once had been before (Hardin xiv). It was in the aftermath of the war, then, that the members of the courts saw the potential in themselves to help bring stability to the German-speaking regions again. They sought to resolve the political needs of the German-speaking regions via cultural and literary means during this Baroque era (Bepler 779; Hardin xiv). It was very much the case, as Bepler writes, that "the era [was] characterized by the tension between a need for codification of rules both in politics and in literature and the chaos of the atrocities of the Thirty Years' War" (779). This political need for order was augmented by the historical lack of unity of the German-speaking regions, especially in contrast to England or Spain or France (Hardin xiv). It seemed that the lack of a central power in the German-speaking regions gave a semblance of disorder that had not been perceived before.

It was in this setting that the *Sprachgesellschaften*, the German language societies of the 17th century, were founded. For the most part, they comprised "noblemen, poets, and scholars in pursuit of a wide variety of patriotic, ethical, and cultural aims" (Chambers and Wilkie 84). Scholars often attribute Prince Ludwig of Anhalt-Köthen's inspiration in founding the first *Sprachgesellschaft*, the *Fruchtbringende Gesellschaft* (*FG*), to the Italian academies, but the long-terms goals set by the *Sprachgesellschaften* demonstrate that they sought to do more than

just imitate Italian literary culture (Newman 10). Their larger concern, as mentioned earlier, was to fulfill the need for political stability in the German-speaking regions after the war, via cultural and literary means. While there were subtle differences in each *Sprachgesellschaft*'s approach to achieving this, there was nonetheless considerable overlap in their work. Blume argues: "*Die Gesamtheit der Tätigkeiten und Intentionen aller Mitglieder aller Sprachgesellschaften in den Blick zu nehmen, ist nicht möglich*" ("It is not possible to consider the totality of the activities and intentions of all the members of all the language societies") (Blume 40). However, this should not mean that any attempts to speak broadly about the impact of the *Sprachgesellschaften* on the evolution of the German language should be dismissed so easily. After all, the features shared across the different societies were what led them to produce texts that were very much the same.

It is understood that one of the main priorities of the *Sprachgesellschaften* was to rid the German language of all traces of any influence by others (Latin, Italian, and French, in particular), which had increased as a result of the war (Chambers and Wilkie 84). The influence of Latin was seen most in the realms of law, academia, and the arts; Italian in the military; and French in domestic matters (Kabatek and Pusch 78). As such, one of the main preoccupations of the *Sprachgesellschaften* was the translation of canonical texts from these other languages into German (e.g. Martin Opitz's translation of Sophocles' *Antigone* (1636) and Seneca's *Trojan Women* (1625), Johann von Rist's translation of Tasso's *Il padre di famiglia* (1650)), such that they could assert the presence of the German language in European literary high culture, as well as diminish the influence of the other languages on their own (Hardin xii; Muirhead 103). This entailed selecting German words over foreign loan words, as well as using German grammatical forms over those that had been adopted from the other languages (Chambers and Wilkie 84; Hardin

8). Some of the most prominent members of the *Sprachgesellschaften* also wrote grammars (Kabatek and Pusch 78). Knowledge of this similarity in the kinds of work produced by the *Sprachgesellschaften*, paired with the coming summary of their make-up, will be important for an evaluation of their impact on the evolution of the German language.

Even though the goals of the *Sprachgesellschaften* were quite similar, membership was not exactly the same in size or make-up across them. For reference, the *FG* was the largest of them at 800 members (Dünnhaupt 797). Moreover, while they had noble patrons, the number of members from that class of society varied too (Strong 89). Seventy-five percent of the *FG*'s membership came from the noble class, but only about fourteen percent of the membership of the *Deutschgesinnte Genossenschaft* (*DG*) did (Otto, "Soziologisches" 152). Members who were not from the noble class came from the educated middle class, as in the case of the *DG,* whose membership comprised mostly teachers, preachers, and lawyers (Otto, "Soziologisches" 157). It is worth re-emphasizing that while it is easy to point out such differences in membership size and level of involvement by the different classes, these differences did not put the societies at odds with one another. In fact, sometimes members were involved in multiple *Sprachgesellschaften,* even though it does not seem that these societies collaborated with each other directly (Van Ingen 11). Again, the primary goals and work were much the same. Moreover, it is important to remember that these different societies achieved bringing together members from different classes in pursuit of their endeavors. It is also in this regard that they were quite similar.

The *Sprachgesellschaften* are perhaps most remembered for their attempt to "purify" the German language (Mast 77; Strong 90). This attempt was by no means a modest one. Hardin calls attention to the fact that "many of the most important works in German literature of the first half of the seventeenth century are adaptations of translations of works from other languages"

(29). Moreover, the *Sprachgesellschaften* were so invested in producing translations that young and aspiring writers, in an effort to gain membership, often would dedicate their own translations to the societies (Otto, *Sprachgesellschaften* 65). With this knowledge, and the knowledge that the *Sprachgesellschaften* also produced grammars, their work can be regarded as prescriptive: it was a real, deliberate effort to ensure that there was a standard, unifying language for all of the German-speaking regions, independent of any influence by the other languages. That said, however, the extent to which the *Sprachgesellschaften* made a lasting impact on the evolution of the German language still remains a hotly contested issue.

Some scholars are quick to dismiss the work by the *Sprachgesellschaften* as having had a low impact on the evolution of the German language, while others are adamant that it was transformative (Dünnhaupt 798; Hardin xii). A brief comparison between the works produced by Luther and the *Sprachgesellschaften* would help to argue in favor of the latter. While it is understood that Luther and the *Sprachgesellschaften* had different motivations for pursuing their respective projects, they were similar because they concerned themselves with translating canonical texts from languages that were held in higher cultural regard than German. This meant that they were able to control not only their choice in words but also the form and manner in which they sought to convey the meaning of the texts. If anyone after Luther had the power, then, to set the German language on a path towards greater uniformity, it would have been the *Sprachgesellschaften.* During this time, the combined efforts of these "noblemen, poets, and scholars" would have far outweighed any single individual's attempts to set the German language in any particular direction. The "seals of approval" on translations approved by the *FG* would have given them the appearance of more legitimacy (Dünnhaupt 797). Moreover, as mentioned before, Luther's *Bibeldeutsch* was in a form that later was adopted by most German speakers;

and in addition to his success in publishing the Bible and fostering a new religious movement in the German-speaking regions, his success was due in large part to his ability to draw from other forms of the language with which most German speakers were already familiar (i.e. the *Kanzleisprache* and the vernacular of East Central Germany). While the language presented in the translations by the *Sprachgesellschaften* was likely not as reflective of what was actually spoken or written at the time, their potential to reshape the German language can be seen in the make-up of the societies. It was mentioned before that their membership was not limited to only the nobility. Instead, Hardin writes: "The new writer class of this period constituted the bureaucracy of the court; it consisted of middle class scholars, teachers, secretaries, and clergymen, all of whom were united in their ability to read and write Latin, sometimes Greek, and usually one or more vernacular languages" (xii). As such, in their attempts to "purify" the German language, it is quite possible that they drew from the forms with which they already were familiar (i.e. the vernaculars). The main implication of this is that the translations, when read by those uninvolved in the *Sprachgesellschaften*, would have been more accessible to them; and as such, there would have been greater potential for the more standardized form of German found in these translations to influence their language. As a closing point, though members of this "new writer class" (e.g. Sigmund von Birken (1626–1681), Georg Greflinger (ca. 1620–1677)) were humbler in background than their noble counterparts, their education had given them access to an understanding of the condition of the German language at the time (Berghaus 121, 127, 129; Hardin xii; Paas 50, 57). The *Sprachgesellschaften* provided the fora for them to help attempt to reshape it. In doing so, they also were able to establish their place in society as a potential source of literary and cultural power.

While the translations by the *Sprachgesellschaften* certainly were one of their main contributions to the evolution of the German language, the grammars written by some of their most prominent members were just as important. The practice of writing grammars did not start with the *Sprachgesellschaften,* so an overview of the history of these texts will be briefly considered. In the early 16th century, there were several notable schoolmasters (Johannes Kolroß, Hans Fabritius, Sebastian Helber, to name a few), who wrote grammars as instructional tools for children and illiterate adults (Painter 233, 235, 237). They contained rules for spelling and grammar (Painter 237). The grammars therefore can be seen as having contributed to the growing literacy rate in the German-speaking regions during the 16th century, which was part of a greater reform in the education system in these areas. It is thus that they helped make it possible for the language shaped by the *Sprachgesellschaften* to have wider reach throughout Germany, than they otherwise would have had (the existence of their work, without the ability of most to read it, would not have allowed for the German language to become more uniform as it had). What makes the grammars of the 16th century different from the grammars written by members of the *Sprachgesellschaften*, though, were the motives of those who wrote them: the former texts were instructional, and therefore prescriptive, but they retained a dialectal character (Painter 223, 237). As such, they were not a deliberate attempt to create a unifying language for Germany. In contrast, the grammars written by members of the *Sprachgesellschaften* certainly were.

As with the earlier, larger discussion on the *Sprachgesellschaften*, the upcoming attempt to speak broadly about the impact of the grammars should not be dismissed so easily. Of course, it should be acknowledged that there were slight differences in the motivations of the grammarians, but the ultimate impact they made on the evolution of the German language was

much the same. Understanding the work done by Martin Opitz (1597 AD–1639 AD) and Justus

Georg Schottel (1612 AD–1676 AD), two of the most prominent literary figures of this time who

belonged to the *FG*, will help to demonstrate this (Gostwick 84; Smart 293).

　　Martin Opitz concerned himself mostly with poetry, a form of literature that one could

say was the most fitting for someone whose goals were what they were. These goals aligned with

those of the *Sprachgesellschaften*, in that he eschewed foreign influence on his work and strived

to set a standard German language (Becker-Cantarino 261; Lockwood 114). However, his goals

also seemed to be much more rigorous. When writing, Opitz had the nobility in mind as his

target audience because he wanted them to write too, such that they could establish the presence

of the German language in literary high culture (Becker-Cantarino 261). He recognized the need

for the nobility's involvement in this endeavor because they had power, whereas that was not

necessarily the case with the scholars (Becker-Cantarino 260). It is thus that poetry seemed to be

the literary form most appropriate for Opitz. He could "set the pattern for the elaborately

complex, elevated, and learned style which separates German baroque poetry from the language

of everyday use" (Chambers and Wilkie 83). In his *Buch von der deutschen Poeterey* ("Book of

German Poetry"), Opitz was able to establish the rules of grammar he thought would achieve this

(Becker-Cantarino 258). It is thus that Opitz's work was without a doubt prescriptive.

　　Likewise, Schottel preoccupied himself with establishing the presence of the German

language in literary high culture. Specifically, he hoped that it would be held as high in regard as

Latin, such that the worth of German texts could match those of the Latin ones (Kyes 198). He

too was rigorous in his endeavors, as he wanted "to make an end to uncertainty in all things

linguistic" (Waterman 142). For Schottel, this meant the following: 1) creating a national

language superior to any dialectal form, and 2) ensuring that this language would be derived

from only the language written by the elite in society (Lockwood 114; Waterman 142). One may

feel tempted to be critical of these goals and dismiss them as being too idealistic. However,

Schottel was without a doubt very influential during his time, and the impact of his work was felt

beyond the *FG* and in a wide variety of disciplines (Smart 295). In *Ausführliche Arbeit von der*

teutschen Haubtsprache ("Detailed Work of the Essential Teutonic Language")*,* Schottel

intended to reveal the "*Grundigkeit* (fundamental essence)" of German, through a

"comprehensive system of word formation" and a "collection of idiomatic expressions" (Smart

298, 300). In *Teutsche Sprachkunst* ("Teutonic Art of Speaking"), which was adopted by many

schools in their curricula, Schottel's primary aim was to encourage them to promote the teaching

of the German language over Latin (Smart 298). While it is acknowledged that, yes, Schottel was

a bit extreme in his hopes for the future of the German language, his motivations nonetheless

were reflective of the sentiment felt by some of the other scholars at the time. That his influence

was far-reaching is evidence for this. It therefore can be said that he, Opitz, and the other

grammarians of the time all perceived and sought to address a certain need to create a

standardized, unifying German language that would increase the potential for their having

greater readership. As such, in the creation of their prescriptive works, the grammarians

contributed to the greater efforts by the *Sprachgesellschaften* to make their mark on the evolution

of the German language.

Neither efforts to create a standard, unifying language for all of the German-speaking

regions, nor the impact of these efforts, ended with the decline of the *Sprachgesellschaften*. The

works written by Johann Christoph Gottsched (1700 AD–1766 AD) and Johann Christoph

Adelung (1732 AD–1806 AD) in the early 18th century also presented rules for grammar and

encouraged readers to adopt East Central German as the norm (Chambers and Wilkie 85; Langer

215; Mitchell; Waterman 44). Moreover, the literacy rate continued to rise as it had since the invention of the printing press, and the fact that schooling was compulsory in the 18th century also contributed to the growing uniformity of the German language (Lockwood 116). Moreover, by the time literary figures like Goethe and Schiller came into prominence in the late 18th century, most, if not all, German universities had adopted German over Latin as the language for academia (Super 72). This movement had begun since Christian Thomasius delivered the first university lecture in German (Super 72). It therefore had become clear during this period that the "unification [of the dialects of the different German-speaking regions] was really an accomplished fact" (Super 83). As such, while some scholars may argue that the *Sprachgesellschaften* had a minimal impact on the reshaping of the German language, they nonetheless would have had to acknowledge, at the very least, that the *Sprachgesellschaften* set the stage for literary German to become the standard, unifying language of *Hochdeutsch* that we know it to be today.

German dictionaries were not written as early as the grammars were, but they did contribute to the further standardization and growing uniformity of the German language in the 18th century (Stevenson 18). During this time, the German-speaking regions still existed as principalities governed locally, but as a result of various socioeconomic changes in these areas over the course of the following century, many members of the German-speaking population began to long for German nationhood (Stevenson 18, 232). In addition to increased urbanization, and therefore, there being a greater number of the German-speaking population in centralized locations, there was "a higher degree of political organization, increased mobility through new forms of transport, and advances in communication technology" (Stevenson 18). These such changes increased contact among different members of the German-speaking population in

different facets of German society, which ultimately was conducive to the formation of a German nation. It was the existence of their common language of German, though, that seemed to offer the greatest potential to help facilitate this. Stevenson writes of the shared German language: "It was both a symbol of unity and a means of accessing and accumulating a body of myths from the past in order to sustain the invention, or imagination (Anderson 1991), of a nation" (18, 323). The idea of a shared German language helped to promote a sense of unity among German speakers, even though there was a lack of any central power. Moreover, the movement towards a standard, unifying German language allowed for greater public discourse among German speakers of different classes of society (Stevenson 19). It was in this setting that the German dictionaries began to be published.

Starting in the mid-19th century, the *Deutsches Wörterbuch von Jacob Grimm und Wilhelm Grimm* (the "German Dictionary by Jacob Grimm and Wilhelm Grimm," henceforth referred to as the *Wörterbuch*) was published in several installments ("The German *Wörterbuch*"). Today, it remains the most renowned German dictionary of its time. The focus of the following discussion therefore will be this dictionary, even though others were published around the time of its publication, such as Adelung's dictionary ("The German *Wörterbuch*," Kistner 690). By this point in German history, the *Sprachgesellschaften* were entities of the past, even though the politics of that period still put a strain on German society. Jacob Grimm, in particular, thought that creating a dictionary ... could culturally unify Germany in a way that German politics of the day, with its competing interests and egos, had hindered" (Kistner 689). By the time he and his brother, Wilhelm Grimm, started working on the dictionary, they were already distinguished leaders in their study of the German language ("The German *Wörterbuch*"). A summary of their work would prove helpful, before an evaluation of their

contribution to the evolution of the German language is made. With their *Wörterbuch*, they

sought to make a "general survey of all known authors, great and small, who had contributed to

German literature since the era of the Reformation" ("The German *Wörterbuch*"). To this end,

they reached out to a

> "vast number of students throughout Germany, requesting them to read such or such books carefully, and annotate or extract for the purposes in hand. Many offered their services spontaneously, and it was proof of the national interest excited by the project that among the volunteers were literary men of the most diverse opinions, provinces, professions, and tastes. Jacob Grimm, in his preface to the first published part, enumerated no less than eighty-three coadjutors in this way. Then special directions were forwarded to each. On a piece of separate paper of prescribed size and shape he was set down each word which struck him as employed by his author in an any way unusual, characteristic, or for any reason worthy of attention; and with it the passage, prose or verse, in which it had occurred.
>
> [The contributors were responsible for] collecting for each word the various citations applicable to it, and fastening them in a bundle together, then placing the whole in two gigantic chests reading for the further process of deciding the proportion of quotations and authorities to be retained, and tracing chronologically and otherwise the shades and transitions of meaning. The genius and taste of individual writers had to be considered as influencing the value to be attached to their testimony" ("The German *Wörterbuch*").

While the *Wörterbuch* was not finished within either brother's lifetime, collaborators continued

and eventually completed the work ("The German *Wörterbuch*"). They even managed to

incorporate works from the *MHD* period ("The German *Wörterbuch*"). The result was something

very much descriptive in nature, and this characteristic of the *Wörterbuch* certainly was

consistent with the brothers' approach to other areas in their study of the German language.

Scholars have characterized Jacob Grimm as "neither creative nor normative, uninterested in

language engineering or idiom cleansing. His was the sociological approach, and in an

explanatory mode" (Collinge 1214). As such, because he had no interest in setting the German

language on a new evolutionary path, it is likely that he would not have wanted for his work to

be regarded as prescriptive. Especially when contrasted with the translations by the

Sprachgesellschaften, the *Wörterbuch* was fairly reflective of the language written before and during its time. It is worth pointing out that while the *Wörterbuch* did not directly capture elements of the spoken language, it did so to the extent that the written language captured elements of the spoken language. Moreover, because the *Wörterbuch* was such a prominent text, and because it would have been referred to for knowledge about the etymologies of different words, it is quite possible that the dictionary was regarded as prescriptive. After all, it drew from works that had been more prescriptive in nature. As such, it is quite possible, that the meanings of words that were not used by the majority of the German-speaking population, but that were introduced by other works that were prescriptive in nature, became more popular because of the *Wörterbuch*.

The Brothers Grimm are perhaps well-known because of their collection of fairy tales. In the first volume of *Kinder- und Hausmärchen* ("Children's and Household Tales"), published in 1812, they included over 150 stories (Grimm and Grimm xxv; "The Original Folk and Fairy Tales of the Brothers Grimm: The Complete First Edition"). It is important to note the following about their methods for the first volume:

> "the Grimms did not travel about the lands themselves to collect the tales from peasants, as many contemporary readers have come to believe. They were brilliant philologists and scholars who did most of their work at desks. They depended on many different informants from diverse social classes to provide them with oral tales or literary tales that were rooted in oral traditions. Although they did at times leave their home—for example, to find and write down tales from several young women in Kassel and Münster and from some lower-class people in the surrounding villages—they collected their tales and variants primarily from educated friends and colleagues or from books" (Grimm and Grimm xxi).

It is thus that the first volume of fairy tales was reflective of the stories created by and shared among a greater majority of the German-speaking population, especially when compared to some of the texts examined earlier (e.g. the poetry by the members of courtly society during the

MHD period). In writing these fairy tales down, "the Brothers endeavored to keep their hands off the tales, so to speak, and reproduce them more or less as they heard them or received them" (Grimm and Grimm xx). As such, they opted to preserve the language with which these stories had been conveyed, when they easily could have replaced the vernacular with a language form that may have seemed more refined to them. They were deliberate in their efforts to produce a work that was descriptive. This approach to the first volume of the fairy tales is therefore consistent with the approach they took with the *Wörterbuch.*

It should be noted, though, that with later volumes of the fairy tales, the Brothers revised the stories. The ultimate result was that their most recent volume, published in 1857, hardly resembled the first one (Grimm and Grimm xix). In particular, Wilhelm Grimm drastically changed the language with which the stories were conveyed, so that it could appeal more to the middle class (Grimm and Grimm xx). However, that is not to say that he ever intended for the work to be prescriptive in its assigning rules to the German language. It seems that the Brothers Grimm had broader concerns, as "they viewed their collection as an educational primer of ethics, values, and customs that would grown on readers, who would themselves grow by reading these living relics of the past" (Grimm and Grimm xxx). This suggests that they did not overtly manipulate the language of the texts, but they nonetheless attempted to shape the cultural values of German society at that time. As with the *Wörterbuch*, they sought to work against the disunity exacerbated by the German politics existing then.

In an examination of texts that helped to direct the evolution of the German language, it would be remiss to omit any discussion on the work by Johann Wolfgang von Goethe (1749 AD–1832 AD) and Friedrich Schiller (1759 AD–1832 AD) (Brown 46; Simons 234). They lived well before the aforementioned German dictionaries were published, but that is not to say that

the influence of their work on the German language diminished over time. To this day, Goethe has been remembered as "the greatest writer of the German tradition," for works such as *Faust* (1808) (Brown 49, 61), while Schiller has been deemed "a universal genius generally regarded as the greatest German dramatist," for works such as *Die Räuber* (1781) (Simons 237). That they explored a wide variety of interests over the course of their lives, and that they were prolific writers in a such wide variety of disciplines, helps to explain why their influence was so far-reaching. Both wrote poetry, prose, and dramas and were part of the *Sturm und Drang* literary movement; Goethe also was a scientist and literary theorist and critic; and Schiller a historian and physiologist (Brown 50, 52; Martinson 9). The quantity of texts that they were able to produce was in and of itself impressive, but what made their works so remarkable was the novelty of thought introduced in them.

Through their literary works, both Goethe and Schiller sought to challenge the political climate of the day. Goethe, in particular, did not support the growth of nationalism, while Schiller's "hostility toward and contempt for arbitrary political power and despotic rules [ran] like a leitmotif throughout his works" (Roberts; Simons 239). It therefore seems that Goethe and Schiller did not make any deliberate attempt to set the German language on a different evolutionary path, in the same way that the *Sprachgesellschaften* had. However, it seems that they indeed attempted to shape the cultural values of German society at the time, through an approach analogous to that of the Brothers Grimm. Goethe and Schiller were less concerned with creating works that were prescriptive in nature, and instead, they were more concerned with the ways in which their works could influence thought in a wide variety of disciplines, including politics. Martinson writes: "in the alliance between Goethe and Schiller, there is an amalgamation of poetry and philosophy, physiology and natural science, psychology and

spirituality, that is indicative of what we would today call the interdisciplinary texture of their

work" (8). The individuals whose work Goethe and Schiller influenced included but were not

limited to George Friedrich Hegel (1770–1831), Karl Marx (1818–1883), Friedrich Nietzsche

(1844–1900), Carl Jung (1875–1961), and even Charles Darwin (1809–1882) (Bradley vii;

Johnston 133; Kaufmann 22; Lawson xxiv; Lewes; Simons 253; Singer 133). Each of these

individuals gained prominence in their respective disciplines in their own right. It is thus that

Goethe and Schiller were, without a doubt, successful in their endeavors to contribute to the

fields that interested them. That they were able to influence work by other prominent figures,

from a wide variety of disciplines, even well past when they were alive, is evidence for this.

The contributions by Goethe and Schiller to the creation of a German geo-linguistic space

are especially worthy of consideration. The impact of their works on German society was

conducive to the formation of a German nation, which was realized under Bismarck's rule

(Hardin xiv; Hayes 404). To probe this further, it would be helpful to recall Gudewitz's

description of Benedict Anderson's concept of 'imagined communities':

> "The concept of *nation* used here refers to Benedict Anderson's 'imagined communities.' Constituted by social communication, the nation becomes historically founded by and is repeatedly aggregated to nationalising narratives. We can find these dense narrations in festival speeches, poems, sites of memories and other concepts of national identity. As an emerging product of social communication, the nation is bound to social groups and the communicative interaction of their members. Eventually, it should be seen as constituted by this *interaction*" (588).

While Goethe and Schiller did not write any of these narratives, the writers of these narratives

(e.g. organizers of the 1859 celebrations for Schiller's 100th birthday) would often refer to the

beliefs held by Goethe and Schiller (Gudewitz 587). Goethe felt that a German nation could be

one of "poets and thinkers" (Brockman 332), while Schiller envisioned "a nation-building force

of literature and theater" (Frevert 309). It is thus that Goethe and Schiller did not necessarily

advocate for the creation of a German nation-*state*. Instead, they were more concerned with the ability of members of the German-speaking population to contribute to the German literary tradition. They envisioned the creation of what scholars today call a *Kulturnation* ("cultural nation"), though members of German society who lived after they did and who were influenced by them wanted the unification of the German-speaking regions to be realized as a nation-state (Brockmann 116; Koepke 271). It should be understood, though, that ever since Bismarck brought these regions together as a German nation-state, "it has changed not only in its political and cultural orientation, but also in its social and territorial composition (Frevert 307). That said, what has helped to keep it more or less intact, throughout all this time, and despite any political fragmentation has that occurred since 1871, has been the writing of the aforementioned narratives. The writers of these narratives drew inspiration from prominent literary figures like Goethe and Schiller, in efforts to realize their own vision for a German nation.

3.0 A Statistical Analysis of the Evolution of German Prepositions

3.1 Background and Research Question

      As mentioned before at the very beginning of my thesis, the purpose behind the upcoming study on the evolution of German prepositions is two-fold: 1) it informs the humanities-based approach to understanding the evolution of the German language, by providing a quantitative measure of how German prepositions have evolved, and 2) it is a follow-up to an earlier study conducted by Jamrozik, et al. on the evolution of English prepositions.

      The earlier work by Jamrozik, et al. found that spatial uses of English prepositions emerged before non-spatial uses. The current study on German prepositions attempts to answer a similar question: have uses of German prepositions become less spatial (i.e. more non-spatial) over time? The results for German prepositions are expected to be consistent with the findings of the earlier study on English prepositions. Therefore, the prediction is that uses of German prepositions have become less spatial over time.

      As in the English language, prepositions in the German language play a fundamental role as a part of speech. They name relationships between two or more items, which can be people, places, things, ideas, or concepts. Jamrozik, et al. writes: "Using prepositions to label relationships allows others to build up mental models of these relationships and to make inferences about them" (Jamrozik; Garrod and Sanford 159-160). A study on prepositions therefore can help to broaden the existing knowledge of the different ways in which language may be used to characterize and describe the world. In particular, an analysis of the *evolution* of prepositions may provide insight into how, over time, the function of prepositions in language, and therefore, their contributions to people's ability to characterize and describe the world, have changed.

In both English and German, the types of uses of prepositions can be characterized as spatial (e.g. the apple is *in* the bowl) or non-spatial (e.g. the boy is *in* love, the train arrives *in* one hour). Non-spatial uses of prepositions can be further classified as temporal (e.g. the train arrives *in* one hour) and/or abstract (e.g. the boy is *in* love). In German, there are understood to be four prominent cases that prepositions take on: accusative, dative, genitive, and two-way, where two-way prepositions can take on either the accusative or the dative case. These cases dictate what the articles and adjective endings preceding the prepositional objects are. Generally, the presence or absence of motion or a change in condition in a prepositional phrase dictates whether a two-way preposition takes on the accusative or dative case. If motion or a change in condition is not involved, the preposition often times takes on the dative case. If motion or a change in condition is involved, it often times takes on the accusative case. For example, "das Gemälde hängt *an* <u>der</u> <u>weißen</u> Wand" means "the painting hangs *on* <u>the</u> <u>white</u> wall," where the case of *an* is dative. In contrast, "sie hängt das Gemälde *an* <u>die</u> <u>weiße</u> Wand" means "she hangs the painting *on* <u>the</u> <u>white</u> wall," where the case of *an* is accusative.

Before an attempt is made to study the evolution of German prepositions, an overview of the earlier study on English prepositions would be worthwhile. The approach used in the study of English prepositions inspired the approach used in the current study on German ones. In the earlier study on English prepositions, Jamrozik, et al. sought to answer the following question: did spatial uses of English prepositions emerge before non-spatial uses of prepositions? The authors predicted that spatial uses of English prepositions emerged before non-spatial uses. The findings of the study supported their prediction, as the results indicated that spatial uses of English prepositions emerged about 200 years before non-spatial ones.

For this study, the 12 most frequently-occurring English prepositions according to the Corpus of Contemporary American English were first selected. This corpus is made up of over 520 million words drawn from a wide variety of registers (i.e. spoken, fiction, magazines, newspapers, and academic texts) from 1990 to 2012 (Table 1) (Davies). The *Oxford English Dictionary* (*OED*) then was used to collect the definitions provided for each of these prepositions (*Oxford English Dictionary online*). The following information was recorded for every definition listed for each preposition: its year of first emergence, and whether the definition demonstrated a spatial, temporal, and/or abstract use of that preposition. There were 24 definitions that did not have a definitive first year of emergence, other definitions that provided only the author's birth and death years, as well as two definitions for which the preposition was used as an adverb. These definitions were excluded. In total, 634 of the 660 definitions provided by the *OED* were studied.

Table 1: The 12 most frequently-occurring prepositions according to COCA.

1. in	5. from	9. of
2. to	6. by	10. through
3. on	7. about	11. after
4. at	8. into	12. over

A linear mixed effects regression was used to test the prediction that spatial uses of prepositions tended to emerge before non-spatial uses. Indeed, spatial uses tended to emerge about 199.61 ± 44.99 (standard error) years earlier than non-spatial uses. Table 2 lists the estimated years of emergence of spatial and non-spatial uses of the twelve prepositions of interest.

Table 2: Estimated years of emergence of spatial and non-spatial uses of prepositions.

Preposition	Spatial Use	Non-Spatial Use
1. to	1086	1235
2. in	1128	1320
3. after	1146	1296
4. by	1149	1343
5. from	1183	1309
6. of	1214	1347
7. through	1216	1417
8. into	1236	1449
9. about	1244	1477
10. on	1246	1561
11. at	1248	1389
12. over	1302	1649

This earlier work found that spatial uses of English prepositions emerged before non-spatial uses. The current study on German prepositions attempts to answer a similar question: have uses of German prepositions become less spatial (i.e. more non-spatial) over time? The results for German prepositions are expected to be consistent with the findings of the earlier study on English prepositions. Therefore, the prediction is that uses of German prepositions have become less spatial over time.

The availability of source material required for the historical analysis of German prepositions differs from that of the English prepositions—there is no source equivalent to the *OED* to use for the German analysis. However, the logic of the study on German prepositions parallels that of the earlier study on English prepositions. A representative set of some of the most frequently-occurring German prepositions was selected using corpus data. Samples of the prepositions then were collected from the three following corpora: the *Referenzkorpus Altdeutsch* corpus (750 AD–1050 AD), the *Korpus of Mittelhochdeutsch Grammatik* corpus (1020 AD–1350 AD), and the *Deutsches Textarchiv* corpus (1600 AD–1900 AD).

The samples served as data points for each preposition. Each sample was categorized as exhibiting a spatial or non-spatial use of the preposition. The type of use (spatial vs. non-spatial) was the dependent variable, and the year of use was the independent variable used to analyze the relationship between year of use and type of use of a preposition. It was predicted that over time, uses of the prepositions have tended to become more non-spatial rather than spatial.

3.2 Methods

To identify German prepositions of interest, the SUBTLEX-DE corpus was used to draw up a list of the 20 most frequently-occurring German prepositions (Table 3) (Brysbaert). The SUBTLEX-DE corpus is made up of 25.4 million words and draws from spoken-like language in the form of subtitles (Brysbaert 14).

Table 3: The twenty most frequently-occurring prepositions according to SUBTLEX-DE.

1. *zu*	6. *für*	11. *bei*	16. *ohne*
2. *in*	7. *an*	12. *vor*	17. *unter*
3. *mit*	8. *aus*	13. *über*	18. *wegen*
4. *auf*	9. *um*	14. *bis*	19. *gegen*
5. *von*	10. *nach*	15. *durch*	20. *seit*

Contractions including prepositions (e.g. *zum*, a contraction for *zu dem*, which means "to the") were excluded. It was beyond the scope of the study to measure the extent to which either the preposition or the article following the preposition contributed to the meaning of the entire contraction. Da-compounds (e.g. *damit*, which means "with it") also were excluded. It was beyond the scope of the study to measure the extent to which either the preposition or the pronoun preceding the preposition contributed to the meaning of the entire compound.

The 20 most frequently-occurring German prepositions then were classified based on case (i.e. accusative, dative, genitive, and two-way) (Table 4).

Table 4: The twenty most frequently-occurring German prepositions classified based on case.

ACCUSATIVE	DATIVE	GENETIVE	TWO-WAY
für	*zu*	*wegen*	*in*
um	*mit*		*auf*
durch	*von*		*an*
ohne	*aus*		*vor*
gegen	*nach*		*über*
bis	*bei*		*unter*
	seit		

One preposition from each case was selected for study, except for the genitive case. Prepositions that take on the genitive case (i.e. *wegen,* which means "because of") were excluded because they occur much less frequently than the prepositions that take on the other cases. Also excluded were any German prepositions whose English meanings were not examined in the earlier study on English prepositions (i.e. *für*, which means "for"; *bis*, which means "until"; *ohne*, which means "without"; *gegen*, which means "against"; *mit*, which means "with"; *seit*, which means "since"; *vor*, which means "before").

The prepositions selected for study were *durch* (accusative), *bei* (dative)*,* and *an* (two-way). The preposition *durch,* which means "through," was selected over *um* as the accusative preposition for study. The *um zu* construction, which means "in order to," occurs frequently in the German language. It was beyond the scope of the study to measure the extent to which this construction may have directed the evolution of the preposition *um*. For the same reason, *zu* was excluded as a possible dative preposition for study. The preposition *bei,* which means "by," was selected over *von* as the dative preposition for study, as *von* may be used in the passive construction to signify the agent (e.g. *von dem Mann* means "by the man"). This passive construction occurs frequently in the German language, and it was beyond the scope of the study to measure the extent to which this construction may have directed the evolution of *von*. The preposition *an*, which means "at," was selected as the two-way preposition for study. The

German preposition *in* was excluded because unlike the English *in*, the German *in* means "in" or "into" depending on its case (i.e. the German *in* means "in" in the dative case and "into" in the accusative case). It was beyond the scope of the study to measure the extent to which either meaning directed the evolution the German preposition *in*. The preposition *auf* also was excluded because it would be remiss to conduct a study on *auf,* which means *"on,"* without a study on *in*. The preposition *über* was excluded because of the high regional variation in its meaning (Waldenberger, personal interview).

Because there is no German etymological dictionary as comprehensive as the *OED,* samples from primary source material written during the *AHD, MHD,* and *NHD* periods were collected and studied. Together, these three time periods overlapped with most of the time span covered by the *OED* (700 AD–). The *Referenzkorpus Altdeutsch* corpus was used to collect samples of texts from the *AHD* period containing the prepositions selected for study (Donhauser, et al.). This corpus draws from German language texts written from about 750 AD to 1050 AD, and it is made up of approximately 650,000 words (Donhauser, et al.). The *Korpus of Mittelhochdeutsch Grammatik* corpus, which has yet to be finalized but to which access was provided by its creators, was used to collect samples of texts from the *MHD* period containing the prepositions selected for study (Klein, et al.). This corpus draws from approximately 100 German language texts written from about 1020 AD to 1350 AD, though 21 texts were excluded because the years provided for when they were written were not specific enough for analysis (Klein, et al.). Finally, the *Deutsches Textarchiv* corpus was used to collect samples of texts from the *NHD* period containing the prepositions selected for study (*Deutsches Textarchiv*). This corpus draws from 1,320 German language texts written from about 1600 AD to 1900 AD, and it is made up of approximately 100 million words (*Deutsches Textarchiv*).

For every sample that contained a preposition selected for study, the following information was recorded: the title of the text from which the sample came, the author of the text, and the year the text was written, as well as whether the sample demonstrated a spatial or non-spatial use of the preposition selected for study. A use was considered spatial if it described the spatial position of the figure with respect to the ground, or non-spatial if it described how the figure related to a ground that was temporal or abstract (Talmy). Whenever estimates for the years were provided, the latest possible date that the text could have been written was recorded (e.g. "the third quarter of the 9th century" would be recorded as 875 AD).

Samples had to meet several criteria in order to be selected for study. Samples were excluded from selection for study if the prepositions selected for study were preceded by the prepositional object (i.e. no postpositions). It was beyond the scope of the study to measure the extent to which postpositions may have directed the evolution of the prepositions. Also excluded were samples in which the prepositions selected for study were preceded or followed by another preposition (i.e. no compound positions). It was beyond the scope of the study to measure the extent to which either preposition contributed to the meaning of the entire compound preposition. Samples in which the prepositional object was a person or group of people were excluded (e.g. the mother, the crowd), since a substantial number of these samples could not be clearly categorized as either spatial or non-spatial. For example, "the boy was with the mother" could mean that the boy was in close spatial proximity to his mother, or that the mother took care of the boy in a more abstract sense. To further reduce the possibility of misinterpretation, also excluded were samples in which the prepositional object was a proper noun, as sometimes, the proper nouns referred to a person or group of people. Finally, samples were excluded if the prepositional object involved a spiritual agent and could be construed as spatial (e.g. "he was at

Jesus' feet"). This was to prevent any variation in the designation of these samples as either spatial or non-spatial due to variation in religious beliefs.

In order to select samples from the *Referenzkorpus Altdeutsch* corpus, all of the samples containing the following *AHD* word equivalents of *durch*, *bei*, and *an* were collected: *duruh, thuru, thuruch, thuruh,* and *thurh* for *durch*; *bi* for *bei;* and *an* and *ana* for *an* (Seebold and Kluge). Then, from each text and for each preposition, the first ten samples that did not fail any of the aforementioned exclusion criteria were selected for study. It was sometimes the case that fewer than ten samples or no samples at all were present in a text for one or more of the prepositions. In total, samples from 29 of the 120 texts were studied (see Table 5).

The procedure to select samples from the *Korpus der Mittelhochdeutsch Grammatik* corpus was as follows. From each text and for each preposition, the first five samples that did not fail any of the aforementioned exclusion criteria were selected for study. It was sometimes the case that fewer than five samples or no samples at all were present in a text for one or more of the prepositions. Therefore, in total, 77 of the 101 texts were studied (see Table 5). Samples from texts written between 1300 AD and 1350 AD that contained the preposition *bei* were not included in the analysis because a collaborator was unable to finish coding these samples by the set deadline.

In order to select samples from the *Deutsches Textarchiv* corpus, the time span covered by the corpus first was divided into fifteen 20-year time periods (after the time period from 1603 to 1619, 1620-1639, 1640-1659, etc.). For each preposition, a random order of samples in each period was generated, and the first ten samples that did not fail any of the aforementioned exclusion criteria were selected for study. In total, the work of 223 authors was represented (see Table 5).

	Referenzkorpus Altdeutsch	Korpus der Mittelhochdeutsch Grammatik	Deutsches Textarchiv
durch	72 samples in total representing 14 texts	371 samples in total from 76 texts	150 samples in total representing the work of 105 authors
bei	46 samples in total representing 11 texts	306 samples in total representing 70 texts	150 samples in total representing texts by 117 authors
an	73 samples in total representing 14 texts	390 samples in total representing 79 texts	149 samples in total representing texts by 106 authors
	191 samples in total representing 30 texts	1,067 samples in total representing 80 texts	449 samples in total representing texts by 218 authors

Table 5: Number of samples and texts studied from each corpus for each preposition

3.3 Results

It was predicted that the uses of the German prepositions *durch, bei*, and *an* tend to become more non-spatial rather than spatial over time. In other words, the likelihood of a preposition use being spatial should *decrease* with time. For example, a preposition should be more likely to be used spatially in 750 AD than 1750 AD. To test this hypothesis, a linear mixed effects analysis using R was performed (Bates, et al.; R Core Team). This was to characterize the relationship between the year of use of a preposition and its type of use (i.e. spatial or non-spatial). This type of analysis made it possible to model the variation in uses for each of the three prepositions. It was anticipated that the three prepositions might differ in their respective patterns of use over time: the use of one preposition might become less spatial earlier on in the evolution of the German language compared to the use of another preposition, which might become less spatial later on.

The fixed effect in the model was year of use. Intercepts for the random effect of preposition and by-use random slopes for the effect of year were included. Comparison of the full model against a null model that did not include the fixed effect of year allowed for *p*-values

to be obtained. The year of use of a preposition did not reliably predict its type of use ($\chi2(1) =$ .05, $p = .820$).

      In the three corpora, multiple preposition samples were sometimes collected from works written by the same author. It was possible that authors systematically varied in their type of preposition use. For example, authors whose works are in the *Referenzkorpus Altdeutsch* corpus typically wrote religious texts (e.g *Murbacher Hymnen, Tatian*), and they may have used non-spatial language more often than would otherwise be expected. In order to explore differences due to author variation, any authors who provided only one preposition use were eliminated from the dataset, leaving authors who provided two or more uses. Using this limited dataset, the same model was repeated as before, but now with author added as another random effect along with the random effect of preposition. The fixed effect in the model was again year of use. This analysis made it possible to model the effect of author and preposition on the relationship between year and type of use. Comparison of the full model against a null model that did not include the fixed effect of year allowed for *p*-values to be obtained. The year of use of a preposition again did not reliably predict its type of use ($\chi2(1) = 0.00$, $p > .999$).

      In order to examine whether the relationship between year and type of use was stronger in any of the three time periods, a separate linear mixed effects analysis was performed for each. These analyses indicated that year of use of the prepositions did not reliably predict their type of use in any of the three periods (year $\leq$ 1200 AD: $\chi2(1) = 0.059$, $p = .808$; 1200 AD < year < 1603 AD: $\chi2(1) = 2.801$, $p = .094$; year $\geq$ 1603 AD: $\chi2(1) = 1.232$, $p = .268$).

      Because it was anticipated that the uses of the prepositions *durch, bei*, and *an* each would differ in their respective patterns of use over time, a separate linear mixed effects analysis was performed on each. The fixed effect in the model was year, and intercepts for the random effects

of preposition and author and by-use random slopes for the effect of year were included.

Comparison of the full models against null models that did not include the fixed effect of year

allowed for *p*-values to be obtained.

For *durch*, year of use was not a significant predictor of the likelihood that the use was

spatial ($\chi2(1) = 1.853$, $p = .174$). Nonetheless, the estimates derived from the model did suggest

that the uses of *durch* tended to become more non-spatial over time. With every year, the uses of

durch were .9988 likely to be spatial as the year before (i.e. they were .0012 less likely to be

spatial). For *bei*, year of use was a significant predictor of the likelihood of spatial use ($\chi2(1) =$

6.66, $p = .0098$). With every year, uses of *bei* were .0014 less likely to be be spatial. For *an*, year

of use was also a significant predictor of the likelihood of spatial use ($\chi2(1) = 10.473$, $p =$

.0012). In contrast to the other two prepositions, the model estimates suggest that with every

year, uses of *an* were .0015 times more likely to be used spatially.

To summarize, when all of the samples containing *durch, bei,* and *an* were analyzed

together, year of use of the prepositions was not a significant predictor of the likelihood of their

type of use. However, when the prepositions were examined independently, the results varied.

For *durch,* year of use was not a significant predictor of the likelihood of its type of use, though

the model suggested that uses of *durch* tended to be less spatial over time. For *bei,* year of use

was a significant predictor of the likelihood of its becoming less spatial over time, and for *an*, the

effect was reversed.

3.4 Discussion

This study attempted to answer the following question: have uses of the German prepositions *durch, bei*, and *an* tended to become less spatial over time? This study on German prepositions was a follow-up to an earlier study on English prepositions. Jamrozik, et al. writes of the earlier study:

> "Among the views that have been put forward are that all uses (spatial and non-spatial) draw on a common meaning that is adjusted by context, that non-spatial uses are idiomatic and developed independently of spatial uses, and that non-spatial uses emerged from spatial uses. Tracing the development of preposition uses over time, we found support for the idea that non-spatial uses of [English] prepositions emerged from spatial uses over the course of language history" (Jamrozik, et al.).

It was expected that the findings from the study on German prepositions would be consistent with those from the earlier study on English prepositions. As such, in this study on German prepositions, it was anticipated that year of use would reliably predict type of use (i.e. spatial vs. non-spatial), and that with every year, the likelihood of preposition uses being non-spatial would increase. The current findings on German prepositions were only partially consistent with the findings on English ones.

The results indicated that overall, when the three German prepositions were analyzed together, year of use was not a strong predictor of the likelihood of spatial (vs. non-spatial) use. However, when the prepositions were examined independently, the results varied. The year of use was not a reliable predictor of type of use for *durch*, although the model suggested that its uses tended to be more non-spatial over time. For *bei,* year of use was a significant predictor of increased non-spatial use, and for *an*, the effect was reversed.

In predicting that the findings from the study on English prepositions would hold for German prepositions, it had been assumed that to a significant extent, the evolution of German prepositions resembled that of English prepositions. As previously acknowledged, the evolution

of the German language was directed by different literary movements, prominent literary figures, and any others who had substantial religious, cultural, or political power that were all unique to it. Nonetheless, it was thought that the evolution of German prepositions would have been unaffected by these such factors. It was thought that a change in type of use of German prepositions over time would have been too subtle to have been affected.

Certain complexities in the history of the German language were absent in the history of the English language. They may help to account for the differences in the languages' respective evolutions and why the findings from the study on English prepositions did not hold for the study on German ones. Both languages are similar to the extent only an elite few were able to read and write for much of the histories of both languages. Nonetheless, there are major aspects of the history of the German language that make it entirely different. For example, it is characterized by its regional dialects, each of which has evolved in a nuanced way (Aschenberg 707; Chambers and Wilkie 55, 59; Painter 223, 237; Salmons 271; Super 83; Waterman 115). Contributing further to the historic absence of a standard, unifying German language was the absence of a central power, and instead, the presence of many German-speaking principalities governed locally (Hardin xiv). Moreover, there were a substantial number of writers throughout the history of the German language who sought to fulfill a need for a standard, unifying language (Hardin xiii; Lockwood 114; Waterman 142). By writing prescriptive works, they made a deliberate effort to shape the German language. No such movement in the history of the English language was comparable in scale.

The aforementioned complexities in the history of the German language may help to explain why overall, the findings from the study on German prepositions do not resemble those from the study on English prepositions (i.e. for English prepositions, year is reliably related to

type of use, whereas for German prepositions, it is not). However, they do not explain why it is that the findings were different for each of the German prepositions *durch*, *bei*, and *an*, even though the same pattern held for all the English prepositions (i.e. non-spatial uses emerged after spatial uses). As mentioned before, for *durch,* year of use was not a significant predictor of the likelihood of its type of use, though the model suggested that uses of *durch* tended to become more non-spatial over time. It is possible that the use of *durch* in the passive construction to signify the agent (i.e. *es wurde durch einen Sturm zerstört,* which means "It was destroyed by a storm") complicated the pattern of meaning change. It was beyond the scope of the study to examine how this passive construction may have directed the evolution of *durch*. However, the absence of an attempt to make that distinction between its use as a preposition or in the passive construction may have led to findings that were not reflective of its evolution as a preposition. Findings showed the predicted effect for *bei* (i.e. they were consistent with the findings for the English prepositions), but the effect was reversed for *an*. It should be noted that *bei* also may be used as a prefix, but when compared to *an* and the use of *an* as an adverb and prefix, the use of *bei* not as a preposition occurs relatively less frequently than *an* not as a preposition. Therefore, the absence of a more deliberate attempt to factor in the use of *an* as an adverb may have complicated the results. Moreover, the meanings behind these prepositions, and therefore, the contexts in which they are typically used, may have weakened the results. The preposition *bei* can be used more broadly to name relationships, while uses for *an* as a preposition tend to be more specific (i.e. *sie bleibt bei ihren Eltern* means "she is staying with her parents," even though she may not be at their home at the very moment; *sie ist an der Uni* means "she is at the university"). As such, the potential for a wider variety of meanings of *bei* may have allowed for a greater consideration of its different types of uses (i.e. spatial or non-spatial).

There are several limitations to this study. Though the number of samples selected, as well as the number of texts and authors represented, were sufficient to conduct analyses, the following limitations should be acknowledged, as they may help to inform plans for a more comprehensive follow-up study on German prepositions. One limitation to this study is with regards to how reflective the samples were of the types of preposition uses (i.e. spatial or non-spatial) that occurred throughout the history of the German language. These samples were drawn from written works. As such, they are not necessarily representative of the language spoken at the time that they were written. While the texts would have influenced the spoken language and vice versa, the extent to which the texts are representative of the language spoken during the time that they were written cannot be gauged. This might especially be the case with the earlier texts, which were written when the majority of the German-speaking population was illiterate.

Limitations to this study also lie with the source material and the method by which the samples were collected and selected. It is understood that not all texts written during the three time periods were represented. Many had been lost or destroyed, and it was not uncommon for samples to have come from the remnants of texts. The dialectal nature of the German language also was unaccounted for. This study assumed that a change in type of use of German prepositions over time would have been too subtle to have been affected by this characteristic of the German language. However, as mentioned before, the German language is characterized by its regional dialects, each of which has evolved in a nuanced way. No deliberate effort was made in this study to categorize the samples based on region and then examine the resulting groups independently. Moreover, in the case of the *AHD* and *MHD* corpora, respectively, only the first ten or five samples from each text and for each preposition were selected for study. However, it

is possible that the types of uses (i.e. spatial or non-spatial) found in these samples were not reflective of the types of uses found in the rest of the texts.

As stated before, the number of samples selected, as well as the number of texts and authors represented, were sufficient to conduct analyses, but the limitations to this study should nonetheless be acknowledged. They may help to inform any future research on the evolution of German prepositions. A more comprehensive study on the evolution of German prepositions would be a worthwhile endeavor, as it may help to explain why the results from this study were not what they were anticipated to be.

3.5 Future Directions

This study may be regarded as a preliminary one on the evolution of German prepositions, and so a more comprehensive study would be a worthwhile endeavor. A representative set of German prepositions was selected for this study. It comprised one preposition from each of the three major categories of cases (i.e. the accusative preposition *durch*, the dative preposition *bei*, and the two-way preposition *an*). The following question therefore remains: are there broader trends that would become apparent if a larger set of frequently-occurring German prepositions were examined? A follow-up study also would allow for the three different categories of prepositions to be examined independently of each other, and therefore, it may reveal if case is implicated in the type of use over time. To this end, adding samples from *Das Bonner Frühneuhochdetuschkorpus* corpus may be helpful. This corpus draws from 40 German language texts written from about 1350 AD to 1700 AD (*Das Bonner Frühneuhochdeutschkorpus*). It is possible that by including samples from this corpus in the statistical analysis, newer patterns in type of use may emerge.

It is acknowledged that some of the exclusion criteria may have resulted in an underestimation of the number of spatial uses of prepositions earlier on in the history of the German language. Samples in which the prepositional object was a person, group of people, or proper noun were excluded, since a substantial number of these samples could not be clearly categorized as either spatial or non-spatial. However, it may have been the case that a number of the samples in which the prepositional object was a person, group of people, or proper noun could be clearly categorized as spatial, and that they significantly outnumbered the samples that were more ambiguous. In this case, it would have been more appropriate to omit this exclusion criterion. Using this exclusion criterion would have led to an inadequate representation of the types of uses that occurred at the time that the texts were written (i.e. the selected samples would have weighed more heavily towards non-spatial uses, since many of the samples containing spatial uses would have been excluded).

Finally, a study on the evolution of Latin prepositions would help to inform a study on the evolution of German prepositions. As mentioned before, Latin had an influence on the German language that cannot be disputed, and many German language texts were translations from Latin texts by prominent German literary figures (Lockwood 9). As such, in this study, for samples that came from translations, the recorded years of use did not necessarily correspond to the years that the meanings of those prepositions had reached prominence. Therefore, a possible area of study could involve an examination of the original Latin texts themselves and the types of preposition uses found in them. It very well may be the case that any shifts in type of use occurred at the time that those Latin texts had been written, which, of course, was well before they had been translated into German. If this were true, its main implication would be that the

recorded years of use of the German prepositions would not be as useful as hoped in this tracing

of the evolution of the German prepositions.

4.0 Conclusion

The evolution of the German language is, without a doubt, incredibly complex. Changes in the language have occurred due to the influence of other cultures and languages in close physical proximity to it, as well as shifts in power. Particularly with regards to the influence of power dynamics on the language over the course of its history, power has shifted from group to group, and often even from one realm of German society (e.g. religion, culture, politics) to another. Moreover, what scholars call today the historical political fragmentation of the German-speaking regions, as well as the perceived need for their unification, has led to the eventual creation of a German nation-state.

In my thesis, I took an interdisciplinary approach to examine these such factors, as understanding them helped me to trace the evolution of the written German language. Through a humanities-based approach, I examined the works produced by different literary movements, prominent literary figures, and any others who had substantial religious, cultural, or political power. Because of the prescriptive and/or descriptive natures of these works, they shaped the language into what it is today. Through a linguistics-based approach, I conducted a statistical analysis of the evolution of German prepositions. Because they name relationships, prepositions allow language users to characterize and therefore describe the world. This approach provided a quantitative measure for the changes that occurred in the German language, and it also helped to explain the extent to which the conclusions drawn in the humanities-based approach held true.

First addressed in the humanities-based approach were the ways in which the influence of Roman culture (specifically, with regards to Latin and Christianity) pervaded German culture. For much of the history of the German language, even though German was used in everyday life, Latin was regarded as the standard in the realms of religion, law, academia, and literary high

culture (Chambers and Wilkie 53). Then discussed were the works that helped to shape the German language throughout the *AHD*, *MHD*, and *NHD* periods, as well as their respective prescriptive and/or descriptive natures.

The bulk of texts written during the *AHD* period were glosses and translations from the Latin into German by monks and clerics (Lockwood 9). These texts were neither prescriptive nor descriptive, as their primary function was to help guide the clergy in converting as many people as possible to Christianity (Chambers and Wilkie 58). The bulk of texts written during the *MHD* period was infused with deep religious meaning too. The members of courtly society wrote both epic and romance poetry (Lee 560; Lockwood 57). The texts thus were descriptive to the extent that oral tradition captures the vernacular, even though they may have been regarded as prescriptive.

The earliest *NHD* works included legal documents written by the courts, which were written in the vernacular (Salmons 267; Waterman 115). As such, they were more descriptive than prescriptive in nature, though they managed to influence the language of the lower classes in German society (Salmons 267). Luther's approach to his translation of the Bible was similar in that he looked to the language already being used at the time for inspiration. In his translation of the Bible, he drew from elements of the *Kanzleisprache*, the vernacular of his home in East Central Germany, and even other German dialects, which made his work so popular (Chambers and Wilkie 71; Salmons 270; Strong 81; Waterman 129). His work thus was regarded as prescriptive, even though that was not his intention.

After the Thirty Years' War, the lack of a central power for the German-speaking regions gave a semblance of disorder that had not been perceived before. The *Sprachgesellschaften* therefore sought to fulfill the need for political stability in the German-speaking regions after the

war, via cultural and literary means. They also sought to rid the German language of any traces of influence by others (Chambers and Wilkie 84). The *Sprachgesellschaften* wrote German language grammars and translations from the Latin into German (Hardin xii; Muirhead 103). They also inspired the work of Gottsched and Adelung who lived after them (Chambers and Wilkie 85; Langer 215; Mitchell; Waterman 44). Because they all attempted to set the German language on a new evolutionary path, their work was intended to be prescriptive in nature.

The Brothers Grimm *Wörterbuch* and their fairy tales were fairly reflective of the language written and spoken before and during the brothers' time. These works therefore were descriptive in nature, though the Brothers Grimm did attempt to shape the cultural values of German society. Goethe and Schiller were similar in that they did not make a deliberate attempt to shape the German language, but they did aim to shape German cultural values more broadly, envisioning the formation of a *Kulturnation* (Brockmann 116; Koepke 271). Goethe and Schiller influenced the work of a wide variety of individuals who gained prominence in their respective disciplines in their own right. In that sense, their work was regarded as prescriptive. Ultimately, it should be understood that they, like the Brothers Grimm, were more concerned with the cultural implications of their work, than the potential impact that the vocabulary, manner, and form of the language they used had on the German language itself.

The purpose behind the linguistics-based approach to tracing the evolution of the German language was two-fold: 1) it informed the humanities-based approach to understanding the evolution of the German language, by providing a quantitative measure of how German prepositions have evolved, and 2) it was a follow-up to an earlier study conducted by Jamrozik, et al. on the evolution of English prepositions. The earlier work by Jamrozik, et al. found that spatial uses of English prepositions emerged before non-spatial uses. The study on German

prepositions attempted to answer a similar question: have uses of German prepositions become less spatial (i.e. more non-spatial) over time? The results for German prepositions were expected to be consistent with the findings of the earlier study on English prepositions. Therefore, the prediction was that uses of German prepositions have become less spatial over time.

Contrary to the prediction, however, when all of the samples containing *durch, bei,* and *an* were analyzed together, year of use of the prepositions was not a significant predictor of the likelihood of their type of use. However, when the prepositions were examined independently, the results varied. For *durch,* year of use was not a significant predictor of the likelihood of its type of use, though the model suggested that uses of *durch* tended to be less spatial over time. For *bei,* year of use was a significant predictor of the likelihood of its becoming less spatial over time, and for *an*, the effect was reversed.

Explaining these results, which were only partially consistent with the findings on English prepositions, required a consideration of the conclusions drawn from the humanities-based approach. Certain complexities in the history of the German language were absent in the history of the English language. Both languages are similar to the extent only an elite minority could read and write for much of their histories. Nonetheless, major aspects of the history of the German language make it entirely different. For example, it is characterized by its regional dialects, each of which has evolved in a nuanced way (Aschenberg 707; Chambers and Wilkie 55, 59; Painter 223, 237; Salmons 271; Super 83; Waterman 115). Contributing further to the historic absence of a standard, unifying German language was the absence of a central power, and instead, the presence of many German-speaking principalities governed locally (Hardin xiv). Moreover, there were a substantial number of writers throughout the history of the German language who sought to fulfill a need for a standard, unifying language (Hardin xiii; Lockwood

114; Waterman 142). By writing prescriptive works, they made a deliberate effort to shape the German language. No such movement in the history of the English language was comparable in scale.

It is thus that taking an interdisciplinary approach to my thesis was essential to achieving an understanding of the evolution of the German language that was as holistic as possible. The humanities-based approach helped to explain the unexpected results from the linguistics-based approach, while the linguistics-based approach determined to what extent the conclusions drawn in the humanities-based approach held true. The humanities-based approach informed the linguistics-based approach, and vice versa, in the examination of the texts that shaped the German language over time.

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