

A sociolinguistic study of English negation in Manitoba

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Abstract

Negation is a linguistically universal phenomenon (Dahl, 1979); however, it may be expressed differently within and across languages (Miestamo, 2005). This study pursues an explanation of variation in English negation in Manitoba and uses a corpus of interviews recorded in Winnipeg, Steinbach, and Altona-Winkler-Morden. It investigates the variable use of three forms of English negation: *no-negation* (e.g., I have no food), *not-negation* (e.g., I don't have any food) and *negative concord* (e.g., I don't have no food). This research concentrates on both linguistic and social factors through the lens of variationist sociolinguistics. It aims to explore how different linguistic factors i.e., *verb type* and *indefinite pronoun* and social factors i.e., *generation*, *gender*, *socioeconomic status*, *rurality*, *religious affiliation* and *first language* impact the variation of English negation in Manitoba. This research, in particular, investigates whether there is a change in progress in English negation in Manitoba.

The most obvious finding to emerge from this study is that linguistic factors have a more robust effect on the variation of English negation than social factors. While lexical verbs strongly favour *not-negation*, functional verbs significantly disfavour this variant. This study supports Tottie's (1991 b) hypothesis that high frequency verbs like functional verbs tend to appear with *no-negation* and low frequency verbs like lexical verbs favour *not-negation*. The findings show that although there is no obvious change in progress among generations, there is a split between older generations and younger generations. Low German L1 speakers also prefer *no-negation* in their conversations more than English L1 speakers. This study suggests that according to *shortest path* principle (Wald, 1996) these speakers transfer their L1 form of negation into their L2. Location also shows significant impact on the variation of English negation, with Steinbach having the highest rate of *no-negation* among all locations.

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Chapter 1: Introduction

This study investigates the variation of English negation in Manitoba. According to Mazzon (2004, p. 112), “purely syntactic approaches are not sufficient to explain the phenomena related to English negation” since other factors (like social factors) also play a significant role in conditioning the variation. Therefore, in this research I focus on three different types of negation in English, i.e., *no*-negation, *not*-negation, and negative concord, concentrating on both linguistic factors and social factors through the lens of variationist sociolinguistics. This study aims to explore how different linguistic factors i.e., *verb type* and *indefinite items* and social factors i.e., *generation*, *gender*, *socioeconomic status*, *rurality*, *religious affiliation* and *first language* impact the variation of English negation in Manitoba. This research investigates whether there is a change in progress in English negation in Manitoba.

This chapter first discusses the three forms of English negation (section 1.1), followed by a description of variationist sociolinguistics (section 1.2). Section 1.3 gives a description of the locations and the settlers in each location. Finally, the outline of the thesis is described in section 1.4.

1.1 English Negation

English negation is expressed in three different ways: as *no*-negation, *not*-negation and negative concord. In *no*-negation, the verb is preceded by the negative marker *no* (example 1). We can see in (1) how the negative marker *no* is preceded by the copula *be*. The negative marker *no* can also appear as an indefinite pronoun as in (2). In *not*-negation¹, the verb is preceded by the negative marker *not* which “scopes over an indefinite DP with the form *any*” (Childs, 2017, p. 45) (example 3). Example (3) shows that lexical verb *know* is preceded by the negative marker *not* and is followed by the indefinite *anything* to form a *not*-negation. In addition to these standard forms of negation in English, there is a non-standard form known as *negative concord*. According to Giannakidou (2000, p. 87), “negative concord is a phenomenon whereby negation is interpreted just once, though it seems to be expressed more than once”. An example of negative concord is given in (4) where the sentence is negated by both *not* (n’t) and *no*.

All these three forms mark negation in their predicate containing an indefinite pronoun or determiner of the form *any*- or *no*-. The *any*- forms “belong to a group of words and

¹ I use the term *not*-negation to refer to this restricted subset of sentences that include the word *not* (and not to sentences like “It is not raining.”)

expressions” called negative polarity items (NPIs) (Krifka, 1991, p. 150), “which are licensed only in specific contexts, most prototypically negation” (van der Wouden, 1997, p. 4).

- (1) There was **no** car coming. (249mreg56fni)
- (2) There is **nobody** in this world. (263mreg63fpi)
- (3) He doesn't know **anything** about it. (254mreg52fpi)
- (4) I ain't got **no** time. (244mree94fni)

Different terms in the literature are used for *not*-negation and *no*-negation, such as “analytic vs. synthetic” (Poldauf, 1964) , “syntactical vs. morphological” (Dahl, 1979) and “*any*-negation vs. *no*-negation” (Childs et al., 2018). I will use the forms *not*-negation and *no*-negation since these terms straightforwardly show the *not* and *no* negative markers (Childs, 2017; Tottie, 1991 b). There are also different terms in the literature for *negative concord* such as *double negation* (Quirk et al., 1985, p. 799) . In this study, I use the term *negative concord* because *double negation* is where there are two negatives in the interpretation and the sentence semantically is positive (e.g., he doesn't have no books = he has some books) (Childs, 2017, p. 45) this group of examples falls outside the scope of this study and their meaning is different from negative concord.

Most of the quantitative variationist studies on negation with indefinite items have focused either on (i) *no*-negation vs. *not*-negation or (ii) negative concord. The type (i) studies compare the occurrence of *no*-negation and *not*-negation in spoken and written corpora (Peters & Funk, 2009; Tottie, 1991a, b; Varela Pérez, 2014). In these studies, negative concord is neglected, since it is not considered as the standard form of English negation (Anderwald, 2002, p. 101). However, according to Chambers (2004, 2012) negative concord is the prevalent form of negation in non-standard varieties of English. Type (ii) studies have mainly focused on the way negative concord frequently occurs in various dialects of English all around the world (Kortmann & Szmrecsanyi, 2004). There is also some research focusing on the underlying structure and constraints of negative concord (e.g., Blanchette, 2013; van der Wouden, 1997; Zeijlstra, 2004). To my knowledge, Childs et al. (2018) is the only study focusing on all three variants in English dialects in Canada. Likewise, in the present study, I focus on variation between all three variants in Manitoba, in particular Winnipeg, Steinbach, and Altona-Winkler-Morden. I hope this research can shed light on English negation by focusing on the impact of linguistic and social factors on the variation. As mentioned earlier, I use a variationist

sociolinguistic framework to see how both linguistic and social factors constraint the three variants. Therefore, in the following section I will briefly present this framework.

1.2 Variationist Sociolinguistics

Variationist sociolinguistics defines language as “an instrument of social communication” (Labov, 2001, p. 3) and is interested in social and linguistic variation in language. This framework started with the work of William Labov in the study in Martha’s Vineyard and subsequently in New York city in the 1960s and 1970s. Tagliamonte (2006, p. 5) defines variationist sociolinguistics as “the interplay between variation, social meaning and the evolution and development of the linguistic system itself”. Variationist sociolinguists are interested in finding out the impact of both linguistic factors such as parts of speech, word order, phonetic environment, stress, or placement in sentence (e.g., Campbell, 2013; Hock & Joseph, 1996; Labov, 1994; Tagliamonte, 2012) and social factors in language variation and change (e.g., Tagliamonte, 2008). Among social factors, *age*, *gender*, and *social class* are the most studied social variables in variationist studies, given their correlation with patterns of linguistic variation and change (e.g., Labov, 1972 d). In addition to these traditional social factors, other social factors like *rurality* (e.g., Nylvek, 1993) and *religion* (e.g., Baker & Bowie, 2009), have shown significant correlation with language variation and change.

The most frequent method of data collection in variationist studies is the sociolinguistic interview (Labov, 1972b), where the interviews are recorded either individually or in a group. The purpose of the interview is to elicit speakers’ spontaneous language, the vernacular. Vernacular is defined as “the style which is most regular in its structure and in its relation to the evolution of language [...], in which the minimum attention is paid to speech” (Labov, 1972 b, p. 112).

Variationist sociolinguistics includes at its heart studying social and linguistic factors which influence *linguistic variables*. The *linguistic variable*, according to Labov (Labov, 1972 c, p. 94) is saying the same thing in different ways. For example, Tagliamonte (2008) studied intensifiers, also called ‘boosters’. These intensifiers all have very similar functions, denoting a higher degree like *really*, *so*, *awful*, *pretty*, etc., and from studying their patterns, we can learn about language variation and change.

To investigate how the variants behave according to various linguistic and social factors, quantitative methods, essential in the variationist sociolinguistics approach, are used (Guy, 2014). These quantitative methods typically include counting the relative frequencies and

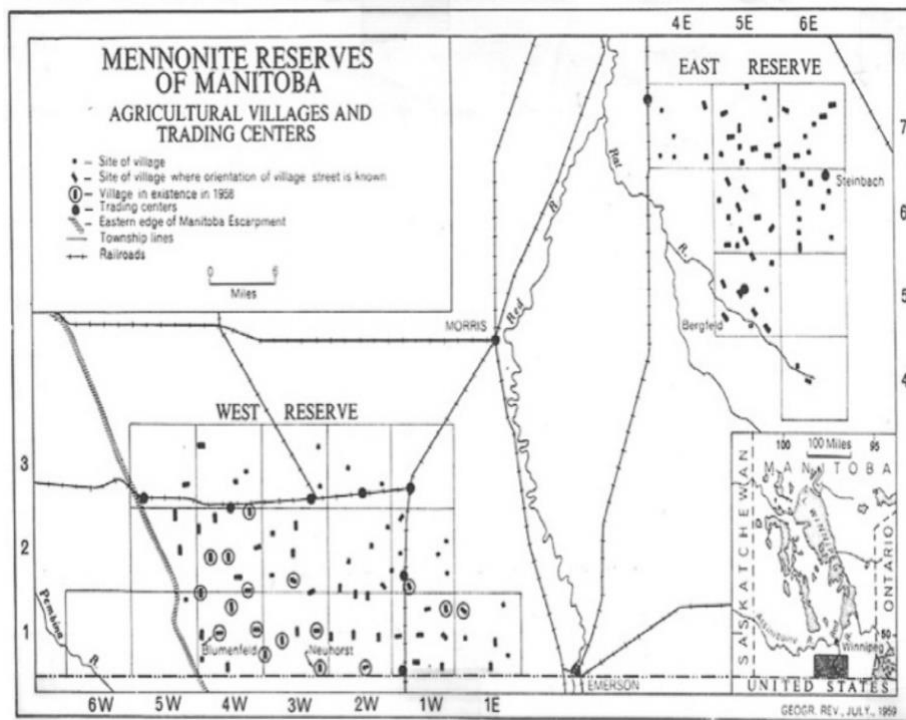
regression models to illustrate the significance of each factor. In this study, I use both relative frequency and mixed-effect-logistic regression to show how linguistic factors (*verb type* and *indefinite item*) and social factors (*generation, gender, socioeconomic status, rurality, religious affiliation* and *first language*) can affect the variation of negation in Manitoba (see chapter 4 for more detail).

1.3 Manitoba

Manitoba is one of the Prairie provinces, bordered by Ontario to the east and Saskatchewan to the west (population 1,278,365), and with Winnipeg (population 705,244) as its capital (Statistics Canada, 2016b). It is home to several ethnic groups who speak approximately two hundred languages, showing the cultural diversity of the province (Statistics Canada, 2016b). Among these languages, Manitoba contains a vast number of non-official languages (e.g., aboriginal languages, Tagalog, German, etc.) (Statistics Canada, 2016b). Among the non-official languages, Low German has the highest number of speakers (63,825) (Statistics Canada, 2016b). These speakers are the descendants of Low German-speaking Mennonites (hereafter LGM), who migrated to Manitoba from Russia during the 1870s (Warkentin, 2000, p. 40) as the result of religious oppression first in Reformation-era Europe and then in Russia (Smith, 1981), and established villages and colonies in this province (Kampen Robinson, 2017). While the cultural autonomy of these families was being threatened by the Russian government, they were welcomed by the Canadian government, who depicted them as “sober, industrious, family-oriented farmers who could turn a wilderness into productive farms and provide a boon to local merchants” (Loewen, 1993, p. 74). These religious conservative communities were from different colonies like *Choritza, Furstenland, Bergthal* and *Klein Gemeind* (Warkentin, 2000). Upon their arrival they were given blocks of land where they could freely engage in their religious ceremonies and Low German language schools. In 1874, two specific tracts of lands known as East Reserve and West Reserve, in Southern Manitoba, were granted to them (Friesen, 1984) (Map 1).

Map 1. *The Mennonite land reserves in southern Manitoba*

(Warkentin, 2000)



1.3.1 East Reserve

East reserve was a large tract of land made up of eight townships located east of Manitoba's Red River (Fisher, 2017), which was initially assigned for LGMs' settlement who were from the *Klein Gemeinde* colony (Loewen, 1993, p. 70). This colony "was a sectarian community bound across distance by kinship, church membership and a common historical experience" (Loewen, 1993, p. 1). According to Warkentin (2000, p. 30), LGMs selected this area because of several reasons: 1. It was close to Winnipeg, the essential trading centre of the province, 2. It was almost empty of settlers and 3. All necessary resources such as hay, wood and water were available in this area. LGM communities primarily settled in three central villages in the East Reserve called Blumenort, Gruenfeld and Steinbach (Loewen, 1993, p.80). However, Steinbach became the centre of LGMs' settlements of Southeast Manitoba in 1940 (Warkentin, 2000, p. 243).

Steinbach

Steinbach (population 15,829) (Statistics Canada, 2016d) is located in Southeastern Manitoba. This rural area has the highest population of LGMs (3,505) in Southeastern Manitoba (Statistics Canada, 2016d) and was established as the centre of this area in 1951. Although Steinbach had been known as the biggest area in Southeastern Manitoba since the 1890's, in 1946 when new roads opened, and trading developed, this village became the most important town in that region. In addition to trading, the local newspaper *Carillon News* was highly effective in making Steinbach the centre of Southeastern Manitoba (Warkentin, 2000, p. 244). The fact that Steinbach had a neat appearance, and its businesses were located all along one street, made this village a pleasant town for farmers, with everything conveniently close at hand (Warkentin, 2000, p. 249). Steinbach has several industries which manufacture products for a bigger area than its trading hinterland. Among the industries, flour milling, beekeepers' supplies factory, Steinbach boat and tire retailing are worth mentioning (Warkentin, 2000, p. 248).

1.3.2 West Reserve

West Reserve was located between the Red River in the east and the Pembina Hills in the west (Fisher, 2017, p. 40). This area was occupied by LGM families from *Choritz* and *Furstenland* colonies in 1875 (Warkentin, 2000, p. 44). According to Warkentin (2000), these colonies were even more conservative and strict than *Kleine Gemeinde*. The reasons behind choosing the West Reserve by these communities were having access to more trees and a desirable soil for farming (Fisher, 2017, p. 41). West Reserve includes several towns, the largest of which are Altona, Winkler, and Morden (hereafter AWM), Gretna-Plum Coulee and other small centers (Warkentin, 2000). In the current study, I concentrate on AWM since they are the largest centres of West Reserve (Map 2) (Warkentin, 2000).

Altona- Winkler-Morden

Altona (population 4,212 in 2016) (Statistics Canada, 2016 a) is a rural town located about 100 km southwest of Winnipeg. The history of Altona starts with the arrival of the LGM community in this town and their settlement in Southwest Manitoba (Penner & Friesen, 1990). The population size of Altona was under 700 in 1944 when this city was known as a village; however, in 1956 the community status raised from a village to a town and the population sharply increased to 1,400 (Penner & Friesen, 1990).

Winkler, Manitoba, population 12,591 (Statistics Canada, 2016 e), is located on the Southwest of Winnipeg and north of the US international boundary. Similar to Altona, this area was initially settled by LGMs back in 1875 (Warkentin, 2000). As a result of LGMs'

expertise in farming and the favourable soil and climate of the city, this area became a trade and processing center for the agricultural sector (Warkentin, 2000) and it has maintained its reputation as a good trading centre since then (Warkentin, 2000, p. 258).

Morden, population 8,668 (Statistics Canada, 2016 c), took its name from Alvey Baker Morden and his wife in 1882 and it became a leading centre in West Reserve after world War II in the 1940's (Warkentin, 2000). As of today, the highest population of LGMs in Southwest Manitoba reside in these three centers: Altona (1245) (Statistics Canada, 2016 a), Winkler (5015) (Statistics Canada, 2016 e) and Morden (1410) (Statistics Canada, 2016 c).

1.3.3 Winnipeg

Winnipeg is the oldest and largest city in the Prairies (Loewen & Friesen, 1954, p. 77) and is the capital of Manitoba. The word Winnipeg has its origin in the Cree name given to the lake meaning *win* 'muddy' and *nippee* 'water'. *Winnippee* was used until 1876 when the post office changed it to 'Winnipeg' (Artibise, 1975, p. 9). Residents and fur traders were living in Winnipeg from as early as 1812 (Artibise, 1975, p. 7) but it was only after 1849 that a number of developments changed the city into the first truly urban community of British Northwest (Artibise, 1975, p. 7).

The population of this urban city was primarily indigenous people (including Cree, Ojibway, and Metis), and of French and Scottish ancestry (Friesen, 1984), but its geographical location was the key factor to attract new arrivals after 1870 (Artibise, 1975, p. 10). Winnipeg accommodated immigrants from all over the world since the opening decades of the twentieth century (Carter, 1996, p. 144). It was during the world war I that the population of this city grew slowly and reached to about 2000 in 1921. Two decades later, in 1941, the capital city was the home of 3000 residents, larger than the other major cities of the Prairies combined, i.e., Saskatchewan and Alberta. Nearly one third of Winnipeggers as late as Second World War were originally from other countries and this ratio was comparable with other prairies cities like Calgary and Edmonton (Loewen & Friesen, 1954, pp. 36–37). These residents were mainly from England (88,000 speakers), Scotland (52,000 speakers) and Ireland (32,000 speakers) (Loewen & Friesen, 1954, p. 37). In addition to these English-speaking residents, Winnipeg also had many residents from other countries. In 1936, about 26,000 Ukrainians, 17,000 Jews, 17,000 Germans, 15,000 French, 12,000 Poles and 10,500 Scandinavians (Loewen & Friesen, 1954, p. 38) resided in Winnipeg, all of whom would have had languages other than English.

Today, Winnipeg is one of the most diverse areas in the Prairies. According to Statistics Canada (2016 f), the population of this city is 705,244 and includes immigrants from all over

the world like The Philippines, Ukraine, China, Nigeria, and many others. Therefore, Winnipeg is not dominated by a specific ethnicity and this fact turns this city into a multi-ethnic capital.

Map 2. Map of Manitoba

<https://www.alamy.com/stock-photo/map-of-canada-manitoba.html>



1.4 Outline of Thesis

This research starts with a review of the literature, providing historical background on English negation and followed by the previous research studies and research questions (chapter 2). The subsequent chapters describes the variable context and adopted methodological approach (chapter 3), the results (chapter 4) and the interpretation of the results (chapter 5).

Chapter 2: Literature Review

This chapter first reviews the historical background of English negation (section 2.1), and then it discusses the related literature on English negation (section 2.2). A summary of findings related to the correlation between linguistic/social factors and language variation is presented in section 2.2 and 2.3 respectively. Lastly, section 2.4 will show the research questions of this study.

2.1 Historical Background

2.1.1 Old English

The English negation system has experienced various changes throughout time (Childs, 2017, p. 48). In Old English, the particle *ne* was the main sentence negator (Mazzon, 2004, p. 26) and it was used pre-verbally to negate a sentence (Fischer et al., 2000, pp. 308–309). This negative marker could be followed by an equivalent of a modern indefinite like *nawiht/nowiht*, *nauht/nouht*, *nawuht* or *na/no* (Jespersen, 1940, p. 127). As we can see in example (5), the negative marker *ne* is occurring pre-verbally and preceded the indefinite *nawuht*.

- (5) **Ne** by min heorte **nawuht** afared
'not is my heart not [at all, literally "nothing"] afraid' (Mazzon, 2004, p. 46)

The choice of *not* and *no* negation on the indefinite in Standard Modern English is directly related to whether *not* is connected to the verb and form sentential negation (Harvey, 2013, p. 15). As it is illustrated in example (6) "only the *no* form is possible when the sentential negation remains with the verb" (examples 6 a, b) and "the *any* form requires a licensing negative antecedent" otherwise is ungrammatical (example 6 c) (Harvey, 2013, p. 16).

- (6)
- a) I didn't see *anything* / I saw *nothing*
 - b) It was *nothing* that I see
 - c) *it was anything that I didn't see (Harvey, 2013, p. 16)

However, we can see in the following examples (7 and 8) that in Old English *ne* + *verb* could occur before and after the indefinite item.

- (7) **Ne** hie huru winedrihten: *wiht ne* logon
 ‘**Nor** did they, however, the lord-friend: blame **not** a *whit*’ (Harvey, 2013, p. 15)
- (8) He *nowiht* to gymeleste **ne** forlet
 ‘He didn’t leave **no** *whit* to neglect’ (Harvey, 2013, p. 15)

Similar to Modern English, in Old English the indefinite *no* could be placed initially and negate the sentence alone (example 9) (Harvey, 2013). According to Mazzon (2004, p. 38), it is because of the Neg-Attraction rule where the negative morpheme is attached to the first possible place in a clause. However, in Old English, as well as the *no* pronoun on its own in the subject position (example 10), the *any + ne* construction could be used (example 11), which is ungrammatical in Modern English (example 12a) (Harvey, 2013).

- (9) Nobody came (Harvey, 2013, p. 16)
- (10) **Nænig** minum yflum me gefultumað
 ‘**none** helps me with my evils’ (Mazzon, 2004, p. 28)
- (11) **Ængum ne** mæg se cræft losian
 ‘**anyone** may not abandon the skill’ (Mazzon, 2004, p. 28)
- (12) Nobody came
 (12a) *anybody didn’t come (Harvey, 2013, p. 16)

2.1.2 Middle English

The Middle English period was from 1200 to 1600 (Mazzon, 2004, p. 56), when the particle *ne* lost its stress, and the negative marker *not* further became the compulsory element in the fifteenth century (Jespersen, 1917, p. 9). Therefore, the English negative system switched from single negation to concord (Childs, 2017, p. 48). The negative concord, which had been an optional phenomenon in Old English, became compulsory in Middle English, and the ‘norm’ until the Early Modern English (Blake, 1996, p. 226).

From the fourteenth through the fifteenth centuries, *ne* became less common and the use of negative concord drastically decreased (Mazzon, 2004, pp. 56-57). Nevalainen (2009, pp. 580–581) points out that negative concord was mainly used by professional males of the middle and upper social ranks. There are various debates about the reason of the disappearance

of negative concord from Standard English. According to Anderwald (2002, p. 114), the decline in use of negative concord in the beginning of the Early Modern English was because of the influence of Latin grammar which lacks negative concord in its structure. Mazzon (2004), on the other hand, believed that the reduction in the use of negative concord was partly because of the facts that *not* is primarily emphatic, and it favours emphatic negators such as *never* or *nothing*. All in all, the rationale behind the decline of negative concord is unclear (Nevalainen, 2009, p. 581).

2.1.3 Seventeenth Century

It was during seventeenth century that *not* became the only negative marker on the verb (Childs, 2017, p. 48) and it became widespread in Modern Standard English (Wallage, 2012, p. 4). To track the direction of change for *no*-negation and *not*-negation, Tottie (1991a) conducted an analysis on Old English and Early Modern English materials in the Helsinki Corpus of English Texts together with the Lancaster- Oslo/Bergen Corpus of Written English and London-Lund Corpus of Spoken English (which contain materials from the 1950s to the 1980s). The results of her study suggest that the negative marker *ne* was initially replaced by *not* and later the subsequent replacement of *no*-negation into *not*-negation began “when *not* was fully available in the late Middle English or Early Modern English” (Tottie 1991a, p. 461). The interpretation that *not*-negation caused a stepwise diachronic decline in *no*-negation is supported by the results of the corpus-based analysis showing a decrease in the rate of *no*-negation since the seventeenth century (Tottie, 1991a, p. 462). Varela Pérez (2014) also supported this interpretation by conducting research on two spoken corpora, the *Survey of English Usage (SEU)*, which contains spoken materials from the late 1950s up to the early 1970s, and the Great Britain sub-corpus of the *International Corpus of English (ICE-GB)*, which has spoken materials from the early 1990s. His analysis showed a 7.5% decrease in the usage of *no*-negation. Moreover, he found some evidence of change in apparent-time as speakers between 18-25 years old prefer *no*-negation less than those over 46. However, there is not an obvious pattern of change in progress as the middle-aged group (26-45) tends to use *no*-negation less than the younger and older groups.

Seventeenth century was also the time where middle-class social climbers were changing the structure of negative constructions (Nevalainen, 1998, p. 275). While the ‘gentry’ and lower-class population continued to use negative concord, the ‘upwardly mobile’ and professionals had practically removed this form of negation, with 90% of their tokens using *not*-negation (Harvey, 2013, pp. 17-18). Therefore, in this era, two variants of negation stayed

on: *no*-negation, the older, more formal, and conservative variant, and *not*-negation, the newer, more informal, and innovative variant (Harvey, 2013, p. 18).

As we can see, there was a correlation in seventeenth century between social factors and the rate of *no*-negation and *not*-negation, the former being more ‘conservative’ and the latter being more ‘innovative’ (Harvey, 2013, p. 18). Now the question is whether this differentiation exists today. Can we say that *no*-negation (the conservative variant) occurs most among conservative groups like male speakers (Tagliamonte et al., 2010) or rural speakers (Chambers & Trudgill, 1998, p. 150)? Is *not*-negation still preferred by professionals (Nevalainen, 1998)? In other words, do these social correlations still exist in English negation today?

2.2 Linguistic Factors

One of the earliest studies on the distinction between *no*-negation and *not*-negation was conducted by Poldauf in 1964. He found that *no*-negation and *not*-negation are influenced by different verb types as *have* and *be*. For example, *no*-negation tends to occur with *have* and *be* (Poldauf, 1964). Tottie (1991a) furthered the discussion by investigating the use of *not*-negation and *no*-negation between spoken and written forms of English. Two of the main factors, which impacted the form of *no*-negation and *not*-negation in her study, were *verb type* and *indefinite item* (*no one, anyone, nobody, anybody, nothing, anything*) (Tottie, 1991b, p. 111) which I will discuss in my study.

The results of Tottie’s study regarding *verb type* reveals that existential *be* (*there + be*) construction is the most frequent construction with *no*-negation (88%) (Tottie, 1991b, p. 194). Similarly, Varela Pérez (2014) and Childs et al. (2018) have the highest rate of *no*-negation with existential *be*, at 77.9% and 98% respectively. Bybee and Hopper (2001) argue that high frequency constructions such as existential *be* are said to be less likely to change, i.e., are more likely to stay with the older variant, *no*-negation. This would explain why *no*-negation, the older variant, appears frequently with this verb construction (Tottie, 1991b, p. 209). Copula *be* is the second most frequent construction appearing with *no*-negation, ranging from 40.7% in the Varela Pérez’s (2014) study to 60% in Tottie’s (1991b, p. 195) study and 84% and 98% respectively in Childs’ et al (2018) research. Copula *be* is followed by *have* and more frequently occurs with *no*-negation (Tottie, 1991b, p. 212; Varela Pérez, 2014, p. 366; Childs et al., 2018, p. 10). Lexical verbs are consistently the least frequent verb type appearing with *no*-negation (Tottie, 1991b; Childs et al., 2018, Varela Pérez, 2014; Childs, 2017). This consistent trend,

therefore, demonstrates how robustly verb type constraints can affect English negation globally.

Both Tottie (1991a, b) and Varela Pérez (2014) analyzed their data based on the relative frequency of these verb types: “the more frequent a given verb or construction is, the likelier it is to retain a more conservative form”, i.e., *no*-negation (Tottie, 1991b, p. 232). The constructions that are highly frequent are said to be less likely to change since they are more susceptible to be reserved, retrieved, and created as a whole (Bybee & Hopper, 2001). Thus, the tendency for *no*-negation to appear with existential *be*, *have* and copula *be* can be due to higher frequency of these constructions/verb types than the lexical verbs which are less frequent and more open to change, i.e., occurring with the newer variant, *not*-negation (Tottie, 1991a, b; Varela Pérez, 2014, p. 370). Tottie (1991b, p. 235) concludes that the result of her study based on the frequency of verb types supports the idea that a switch from *no*-negation to *not*-negation is in progress. However, recently, Wallage (2017) found no sign of change in progress in the use of English negation in his study. He compared the *Penn-Helsinki Parsed Corpus of Early Modern English* (PPCEME) and the *British National corpus* (BNC) and points out that there is a “historical persistence of variation rather than ongoing change” (Wallage, 2017, p. 179).

The next linguistic factor which shows significance in the literature is the *indefinite item*. As I explained in section 1.1, the indefinite item in *no*-negation is either the negative marker *no*, or one of the following indefinite items: *nothing*, *nobody*, *no one*, *nowhere* and *none*. And, in *not*-negation, the indefinite item is a determiner of the form *any*-, i.e., *any*, *anything*, *anybody*, *anyone*, *anywhere*.

Tottie (1991b, p. 308) found that the rate of noun phrases (e.g., *no food*) is lower than indefinite items (e.g., *nothing*) in *no*-negation. Moreover, in the case of pronouns she found that pronouns ending with *-thing* had a slightly higher frequency with *no*-negation than other pronouns. Similarly, Valera Pérez (2014, p. 393) and Herrero-Zorita (2013, p. 488) report that indefinite items ending with *-thing* highly favour *no*-negation.

In a more recent study between different dialects of English, Childs (2017) finds that although cross-dialectal differences exist, *any* and *no/none* consistently have the highest rate of *no*-negation across all the communities. She also mentions that there is a correlation between verb type and indefinite item. Those verbs that more often occur with *no*-negation, i.e., *be*, *have* and *have got*, tend to take the same type of indefinite item, which is *any/no* and *none*, while *do* and *lexical verbs*, which most often appear with *not*-negation, take the indefinite items ending with *-thing* (nothing, anything) more often than *any/no/none*.

In addition to *no*-negation and *not*-negation, this study includes a third form of English negation, called *negative concord*. Previous findings on the impact of indefinite item on negative concord have been inconsistent and contradictory (Childs, 2017, p. 68). While some studies have illustrated that negative concord appears more frequently with indefinite items (e.g., *anything*) than full DP indefinite (e.g., *no money*) (Howe, 1995), other studies have reported no distinction between the two types of indefinite items (Cheshire, 1982).

2.3 Social Factors

2.3.1 Generation

Age is a social factor with an intrinsic correlation with language use (Tagliamonte, 2012, p. 43). Until the mid 1960s, it was primarily historical linguists that investigated language change, by examining data from different points in history. (Cukor-Avila & Bailey, 2013, p. 239) However, Labov (1963, 1966) in his studies of Martha's Vineyard and New York City developed some innovative methodologies that allowed researchers to observe the process of language change. One of these methodologies was the apparent-time construct, "a surrogate for the real time examination of data at different points in history" (Cukor-Avila & Bailey, 2013, p. 240).

The *apparent-time hypothesis* is a method used to study language change in progress. In this hypothesis, it is assumed that older speakers will represent the older form of a variant, while younger speakers will represent a newer form of a variant. Therefore, by comparing the result of older and younger speakers, the trajectory of language change can be detected. (Tagliamonte, 2012, p. 43). Although this technique has been used since the early 1900s (e.g., Hermann, 1929) it became an important part of Variationist Sociolinguistics with Labov's work beginning in the 1960s (Labov, 1963, 1966). An example (among many) of an apparent-time study is found in Tagliamonte (2008), who observed English intensifiers *very*, *so*, *really*, and *pretty* in Toronto to investigate whether there is a change in progress among different age groups. In her corpus, the speakers were born and raised in Toronto and aged between 13 and 60. The result of her study showed that although the four intensifiers were used by speakers of all ages, there was a remarkable difference in the rate of these intensifiers depending on the age of the speaker. *Very* was the most frequent variant among speakers over 50 and it markedly decreased among speakers under 30. Conversely, *really* sharply increased from older speakers to younger speakers and reached to its peak among the 20- to 29-year-old speakers. *So* increased from the over 50 age group to the 9- to 29-year-old age group. Therefore, the outcome

of Tagliamonte's (2008) study illustrated a change in progress, and it was expected that in 2008 the intensifier *so*, which was the most frequently used intensifier among speakers under 20, would be the most frequent variant among the generation to come. In the current study, I aim to investigate whether there is any indication of change in progress in English negation spoken in Manitoba.

2.3.2 Gender

Gender has been found to be one of the most important social variables in predicting language variation. It is defined as a range of social differences between men and women (Eckert, 1989). One of the earliest studies focusing on the relationship between gender and language use was the classic study of variable /r/ production in New York City by Labov (1972d). Labov (1972d) illustrated that females produce more /r/ in postvocalic contexts than their male peers in all socioeconomic and age groups. Moreover, the appearance of postvocalic /r/ was gaining in prestige (Labov, 1972d). Therefore, females in Labov's (1972d) study were using the prestigious variant while males were producing the less prestigious variant. Labov (1990) formulates three generalizations with respect to language and gender: a) women prefer less stigmatized variants and more prestigious variants than men for stable variants (p. 266) b) women take the prestige form higher than men which is called *change from above* (p. 292), and c) women highly tend to utilize the more innovative form more than men which is called *change from below* (p. 274).

However, in her work in Detroit area high school, Eckert (1989) showed that the pattern between males and females in her study does not follow the "gender pattern" proposed by Labov (1990). According to Eckert, language change was always tied with other factors. While gender correlates in clear ways with linguistic variation, the meaningfulness of that variation is only indirectly linked to gender.

For instance, Tagliamonte, D'Arcy, and Jankowski (2010) demonstrate that the use of possessive *have* and possessive *have got* in Toronto varieties of English are tied with both gender and education. They showed that *have*, the innovative form, was favoured by educated and female speakers, while the *have got* form, which is more conservative, was used more by less educated and male speakers.

Gender also plays a vital role in the history of English negation. In the studies on negation, prestige correlated with *not*-negation in Early Modern English and was favoured by people who were more educated with a high social rank (Nevalainen, 1998, pp. 277–8; Nevalainen & Raumolin-Brunberg, 2006). It was led by speakers who were professionals like

lawyers and administrative officers (Nevalainen, 1998). Moreover, the decline of negative concord and the increased usage of *not*-negation was led by men in Early Modern English (Nevalainen, 1998, p. 275). Women in this period “did not promote language changes that emanated from the world of learning and professional use, which lay outside their own spheres of being” (Nevalainen & Raumolin-Brunberg, 2006, p. 131). According to Nevalainen (1998, p. 284), although women did not lead the increasing use of *not*-negation, they did not “lag behind in adopting the innovation”. Since gender can be correlated with different linguistic features, it is essential to have it as one of the social factors in any variationist study.

2.3.3 Socioeconomic Status

Socioeconomic status (hereafter SES) is another social factor which reveals significant results among sociolinguistics studies. In sociolinguistic studies, this factor is normally indexed using a blend of occupation, income, and education (Nevalainen, 2006, p. 113). The corpus used in this study assigned an SES score based on occupation and education (see section 3.7.8).

One of the major studies on language variation and change that focused on socioeconomic status was the neighbourhood study in Philadelphia by Labov (2001). In his study, he selected three neighbourhoods within the city, one neighbourhood adjoining the city to the west and one suburban neighbourhood. He labelled them as working-class, lower middle-class and upper middle-class. For his study, Labov (2001) constructed a socioeconomic index which was based on education, occupation, and residence value. Labov (2001) found that the upwardly mobile upper working-class women highly prefer standard variants than those used by other groups. Recently, Baranowski (2017, p. 316) conducted a study on Manchester's *goose* and *goat* vowels. Similar to Labov's Philadelphia project (2001), he found that higher social class speakers (particularly women) use standard forms more than other groups (i.e., fronted GOOSE before /l/).

The variation of negation also illustrated significant correlation with social class. Nevalainen (1998) conducted a project on two set of materials to investigate how different social factors were correlated with the decline of negative concord (multiple negation in her study). The first set of materials was from 1520 to 1550, and the second was from 1580 to 1610. She distinguished nine categories for the social hierarchy as *nobility*, *upper gentry*, *lower gentry*, *upper clergy*, *lower clergy*, *social climbers*, *professionals*, *merchants* and *other non-gentry*. The result of her statistical analysis illustrated that the decline of negative concord was leading by educated, upwardly mobile professionals and merchants males who switched to use *not*-negation.

As Nevalainen (1998) showed, *not*-negation was an indication of prestige in the sixteenth century and it was significantly used by educated and upwardly mobile professionals. To see whether this variable has the same effect in the present day, Childs et al. (2018) explored the impact of education on English negation between speakers resided in Toronto and Belleville in Ontario, Canada, and Tyneside and York in Northern England. They found that education is not a significant factor in the variation of negation in the present day anymore. Although the previous studies did not find any correlation between this factor and negation, I will include this factor since the information was available in the corpus.

2.3.4 Rurality

Location is another factor often found to be relevant in variationist sociolinguistics: “people adjust their use of certain linguistic variants according to where they live” (Tagliamonte, 2012, p. 36). An important aspect of location is urbanity vs rurality (Nevalainen, 2006, p. 157). Rurality is normally defined “as a place of tranquility away from the hustle and bustle of the city” (Woods, 2011, p. 21) and is associated with homogeneity and stability, while urbanity is linked with diversity and dynamism (Gordon, 2019, p. 436). Rurality can be an identity that people may have in different ways through their daily practices and “language...serves to construct social meanings that place rural in opposition to urban and that mark salient differences within rural societies” (Gordon, 2019, p. 436). One of the earliest studies on the correlation between location and language variation was conducted by Labov (1963) on rural Martha’s Vineyard. Labov found that the elements of a speaker’s region can explain some language variation. While speakers residing ‘up-island’ favoured more centralized variants of both /aɪ/ and /aʊ/, the ‘down-island’ residents tended to use these centralized variants. Despite the very early study of Martha’s Vineyard, a majority of variationist studies since then have carried out their research in urban areas, such as Wolfram (1969) in Detroit, Sankoff and Cedergren (1971) in Montreal, Trudgill (1974) in Norwich, Lavandera (1978) in Buenos Aires, Haeri (1996) in Cairo, and Lawson (2011) in Glas.

On the other hand, the research on language variation which focused on rural speech was primarily within the field of dialectology. This field was also known as ‘dialect geography’ and was known for its collections of maps into a linguistic atlas (Gordon, 2019, p. 437). It traditionally explored speakers who are isolated to find the most distinguishing regional speech varieties (e.g., Orton, 1962, pp. 15–16). The ideal speaker in this type of research was a ‘nonmobile, older, rural male’ known as NORM (Chambers & Trudgill, 1998, p. 29). The language that a NORM speaks was a pure, authentic, and conservative dialect which is

distinctive from those varieties in the city, where language always fluctuates due to the diversity of the population (Gordon, 2019, p. 437). However, as Britain (2017) argues, focusing on only rural research “not only leads us to see things in certain ways, but also leads us not to see certain things too” (pp. 171–72). Therefore, focusing on both rural and urban regions in a sociolinguistic study would be preferable. There are relatively fewer studies comparing both rural and urban locations (e.g., Frazer, 1983; Podesva et al., 2015; Thomas, 1997).

In his study of McDonough County, Illinois, Frazer (1983) found a sound change in progress in the diphthong /au/ which is not traditionally a common feature in this area, according to linguistic atlas records. The comparison between rural and urban speakers showed that rural speakers are leading a change, in contrast with previous studies (e.g., Britain, 2005; Callary, 1975) that found the urban speakers were leading a change. According to Frazer (1983, p. 314), this result stems from the regional differences between Southerners who were farmers and Yankees who resided in towns.

Podesva et al. (2015, p. 175) also examined the California vowel shift (CVS) between countryfolks (rural residents) and townies (non-rural residents) in Redding, an inland, nonurban community. In particular, they analysed the fronting of the back vowels BOOT and BOAT, the raising of BAN and backing of BAT, and the merger of BOT and BOUGHT. One of their hypothesis was that those speakers who are town-oriented show greater use of CVS features while country-oriented speakers show more conservative use of CVS features. They argued that “the closer proximity of these vowel classes in this community can serve as a resource for indexing an orientation to the town” (Podesva et al., 2015, p.177). Moreover, they argued that the closer proximity of these vowels among Town-oriented speakers may show a faster rate of change and it could be based on network affiliation.

Similarly, Nylvek (1993) studied the use of Canadian English between native English speakers in urban and rural areas of Saskatchewan to investigate the phonological variation. The variants in this study included different pronunciations of items such as *athlete*, *collie*, *film*, *genuine*, and *Italian*, among others. Nylvek found that rural speakers appear to use non-standard forms of many variants (e.g., *athlete*, *film* and *Italian*). For example, while the standard pronunciation of the word *athlete* is [ælit], a non-standard variant is also existed in Canadian English [æəlit] which was frequently preferred by the rural speakers (Nylvek, 1993).

These studies show that rurality can correlate with different linguistic features, and for this reason I decided to investigate whether English negation in Steinbach and AWM is different from in Winnipeg. Although few studies had been done on the effect of

rurality/urbanity on linguistic features in English spoken in Canada (e.g., Nylvek, 1993), no study concentrates on the possible impact of this factor on English negation. Therefore, this study could offer some important insights into the area.

2.3.5 Religious Affiliation

Religious affiliation may refer either to the membership of a person in a religious institution, and/or to the level of activity that a member has in a religious organization (Baker & Bowie, 2009). According to Baker and Bowie (2015, p. 117), religious affiliation is highly correlated with one's social network, especially in places where the religious affiliation is markedly high (in this case, Canada). For those people who attend religious services on a regular basis, religious gathering can be like a "third place" (Oldenburg & Brissett, 1982) to develop their social network beside their home and work (Baker & Bowie, 2015, p. 117). For some religions, in fact, the structure of religious gathering may motivate a religious-based social network (Rosen & Skriver, 2015). Therefore, since some studies illustrate that a social network which is based on a religion can affect language behaviour (e.g., Baker & Bowie, 2009), it is essential to consider religious affiliation as a factor in sociolinguistic studies.

A considerable amount of literature has been published on the correlation between religious affiliation (specifically Mormonism) and linguistic system (e.g., Baker & Bowie, 2009; Baker & Bowie, 2015; Rosen & Skriver, 2015). In their study, Baker and Bowie (2015) found that not only Mormons and non-Mormons phonological systems differ from each other, there are also some linguistic differences among those with different level of religious activity (active and inactive Mormon). Similarly, Rosen and Skriver (2015) in their study on Canadian raising found that religious affiliation is significantly correlated with the production of /æɪ/ which means that Mormons pronounce /æɪ/ differently from the other speakers in Southern Alberta. Both studies similarly concluded that close-knit social networks can be correlated to religion which means that it reinforces the linguistic behaviour among religious groups as these groups might want to linguistically mark themselves (Baker & Bowie, 2015; Rosen & Skriver, 2015). It is also predicted that when communities share the same ethnicity and language, they "should resemble each other in their linguistic behaviour while differing from the larger population" (Hoffman & Walker, 2010, p. 42).

As explained in sections 1.3.1 and 1.3.2, Steinbach and AWM are predominantly Mennonite regions. This Mennonite population migrated to Manitoba during 1870s after the anabaptist suppression in Russia to find a better life (Smith, 1981). According to Statistics Canada (2016 a), 63,825 Mennonites reside in Manitoba. Historically, this community also

shared the same language, which is Low German. This motivates me to consider religious affiliation as one of the social factors to investigate whether this factor could show a possible correlation with the variation of negation.

2.3.6 First Language

One of the main aims of sociolinguistics was to study the process of language contact in communities (e.g., Gumperz, 1964; Weinreich, 1968). Language contact historically often happens under situations like wars, conquests, colonialism, slavery, or migration, etc. (Sankoff, 2013, p. 502). Researchers who study language contact generally distinguish between two broad categories of contact-induced changes. One of these categories is borrowing which is defined as “the incorporation of foreign elements into the speakers’ native language” (Thomason & Kaufman, 1988, p. 21). The other category has variously been called substratum influence (Thomason & Kaufman, 1988, p. 21). According to Thomason and Kaufman (1988, p. 21), “substratum interference” refers to when the native language structures have influence on the second language. Trask (2000, p. 44), defines borrowing as “the transfer of features of any kind from one language to another as the result of contact” and interference as “the non-deliberate carrying over of linguistic features from one’s first language (L1) into one’s second language (L2)”.

To date, several studies reported the impact of L1 on L2 on all four major domains of language: the phonetic and phonological level (e.g., Thomason & Kaufman, 1988), lexical level (e.g., Poplack et al., 1988), morphological level (Poplack, 1997) and syntactic level (Wald, 1996). Regarding the impact of L1 on L2 on syntactic level, Prince (1988) analyzed the “Yiddish movement” (Y-movement) construction to investigate the influence of Yiddish on English in the United States. She found that the syntax of Y-movement is identical to pre existing focus- movement in English and this construction has been borrowed from English into the Yiddish language. However, Sankoff (2013, p. 510) argues that the Y-movement is the process of substratum interference.

Wald (1996, p. 516) in his study among Mexican Americans proposed two principles governing the operation of substratal effect: 1) “*The Principle of Normative Assimilation*” and 2) *The Principle of Shortest Path*. The normative assimilation refers to when no violation happens to syntax of the dominant language and shortest path is when the speakers select “those norms of the socially dominant language which correspond most closely to those of the prior language” (Wald, 1996, p. 516). In this regard, Bayley (1999) examined relative pronouns of English among Mexican-American speakers. The result of his study showed that the most

prevalent relative pronoun is “that” and it is produced by adult speakers over 25. He argued that the reason that older speakers favoured using *that* pronoun more than the younger speakers might be aligned to the Spanish substratal influence in the speech of members of this group (Bayley, 1999, p. 132). According to Bayley (1999), the result of his study is compatible with both principles proposed by Wald (1996). First, since *that* can be utilized in most grammatical environments, reliance upon that does not violate any English vernacular norms (normative assimilation). Secondly, the prevalent use of *that* is combined with the influence of the Spanish substrate that is the prevalent use of the pronoun *que*. This pronoun can categorically be used for both human and nonhuman head nouns (Bayley, 1999, p. 131).

As we reviewed, the role of first language can significantly affect different domains of language. In this study, the first language is Low German, which as I explained in section 1.3, is the first language of Mennonite immigrants who settled in Southern Manitoba in 1874. Therefore, we might expect different choices for negation based on substratal effects from Low German, and that is why I am investigating it.

2.4 Research Questions

The immigration into Canadian Prairies was different from Maritime provinces and Ontario (see section 1.3). Therefore, I intent to investigate whether this different layer of immigration has any effect on the way these speakers use negation in their conversations. Based on the previous studies reviewed in sections 2.2 and 2.3, I want to answer the following questions:

1. How are linguistic factors correlated with the choice of negation?
2. How are social factors correlated with the form of negation?
3. Is *not*-negation in the process of replacing *no*-negation?

Chapter 3: Methodology

This section describes the corpus that I extracted my data from, including the subsection of speakers chosen for this study (section 3.1). Then, the procedure of data transcription (section 3.3), and data extraction (section 3.4) is described in detail. Subsequently, the variants with examples are presented (section 3.5) and followed by exclusion (section 3.6) and coding (3.7). Lastly, section 3.8 shows the procedure of data analysis and is followed by a brief summary of the chapter (section 3.9).

3.1 The Corpus

Language in the Prairies (LIPP) is the corpus that I extracted my material from, which concentrates on the language and change in the Canadian Prairies. It includes data from speakers who live in Alberta (n=159), Manitoba (n=141) and Winnipeg (n=45). The speakers have lived in each area since they were at least 3 years old, and have not resided in any other locations longer than 6 months. In LIPP, there are three sets of data collected from each speaker: a wordlist, two reading passages and a sociolinguistic interview. The interviews, which are approximately 45-60 minutes long, are interviews that were recorded between 2011 and 2019. The selected interviews for this study includes demographic information of each speaker such as birth year, gender (male, female), ethnicity (Mennonite, else)², SES (professional, non-professional), first language (English, Low German), rurality (rural, urban) and geographic location (AWM, Steinbach and Winnipeg). The speakers are recorded with a Zoom handheld recorder and Sennheiser EK 100G2 wireless lavalier microphones at 44 kHz in uncompressed WAV format. All the interviews are recorded by an interviewer who is a member of the same speech community as the interviewee to minimize the Observer's Paradox (Labov, 1972 d).

The sub-sample that I selected here includes speakers living in Manitoba only. To investigate how speakers use negation in their spontaneous conversations, the sociolinguistic interviews were chosen. The three main locations that I chose are Winnipeg, Steinbach, and AWM. Winnipeg as the capital is the urban city, while Steinbach and AWM are considered as the rural towns. In the following section I give a detail description about the speakers in this research.

² "else" means anything other than Blackfoot, Cree, Filipino, Mennonite, Mormon, Hutterite, Ukranian and Icelandic.

3.2 Speakers

Eighty one speakers were selected for this study. They were divided into four different generations: Silent Generation (born between 1925-1945) (n=14), Baby Boomers (born between 1946-1964) (n=19), Generation X (born between 1965-1978) (n=15) and Millennials (born between 1979 – 1998) (n=33). As mentioned, all these speakers have lived in Manitoba since their early childhood and haven't lived in any other location more than 6 months. The first languages of the participants were either Low German (n=32) or English (n=49). However, those with Low German as their first language were fully fluent in English. Table (1) below collapses the speakers into social groups, generation, gender, and location to show the overall social stratification of the sample.

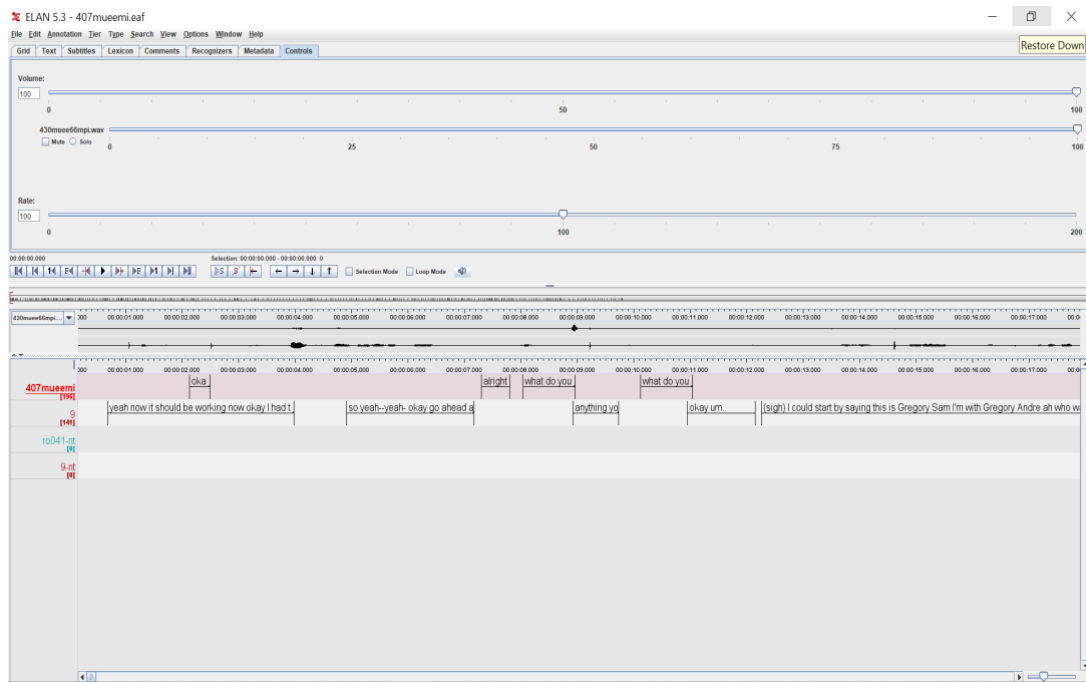
Table 1. Overall distribution of speakers according to generation and gender per location

	AWM		Winnipeg		Steinbach	
	F	M	F	M	F	M
(1925-1945)	7	2	0	0	4	4
(1946-1964)	6	4	4	4	2	3
(1965-1978)	7	3	5	1	3	1
(1979-1998)	6	7	14	6	3	2
Total	26	16	23	11	12	10

3.3 Data Transcription

The interviews were previously transcribed by English native speakers using the Elan Annotation software. This is a free software developed by the Max Planck Institute for Psycholinguistics in Nijmegen (Brugman & Russel, 2004) and has become a standard annotation program for coding linguistic materials. Each interview transcribed with Elan in the sub-sample included four tiers. The first tier was the interviewee, the second tier was the interviewer and the third and fourth tiers were used to add any comment needed for the first and second tiers respectively. Each interview was fully transcribed, carefully labeled based on the demographic information and saved as an .eaf file. The following image illustrates a transcribed file in Elan.

Image 1. Example of Elan Annotation Software



3.4 Data Extraction

I carefully searched the transcriptions of the interviews. Since different transcribers transcribed the corpus, I had to search different spellings and representations to explore the written variation (e.g., no one; noone). However, it was also possible to miss some data due to errors in transcriptions of each audio file. Therefore, I listened to each audio file. This helped increase the reliability of my analysis, as the data does not rely solely on the transcriptions. I subsequently created an Excel spreadsheet to carefully categorise my tokens, to later code for the social factors and linguistic factors. The first column included the *speakers ID* which is followed by *location*, *rurality*, *ethnicity*, *first language*, *birthyear*, *generation*, *gender*, *MI*, and *SES*. These social factors are followed by *negator*, which included the three variants, *examples*, *verb construction* and *indefinite item*. After listening to each interview for a second time, I selected the sentences that had one of the three variants: *no*-negation, *not*-negation and negative concord and added to my spreadsheet.

3.5 The Variants

3.5.1 No-negation

No-negation is where one of the following words appear post-verbally as a complement: *nothing*, *nobody*, *no one*, *none*, *no* and *nowhere*. These forms of *no* variant are **bold** in the following examples.

- (13) There was **no** money (305mrmg26mni)³
- (14) Sometimes those phrases mean **nothing** (305mrmg26mni)
- (15) I have flown **nowhere** in my life (314mrme82fni)
- (16) There is **nobody** in this world (263mreg63fpi)
- (17) There was **no one** there (308mrmg43fpi)
- (18) They were using an English word because there was **none** (270mreg64fni)

3.5.2 Not-negation

Not-negation is where as well as the negative marker ‘*not*’, an indefinite like the following occurs in the predicate: *any*, *anything*, *anybody*, *anyone*, and *anywhere*. These indefinites and the negative marker ‘*not*’ (*n ’t*) are **bold** in the following examples.

- (19) Honestly, I haven’t done **anything** like crazy (401muee99fpi)
- (20) I don’t like talking to **anybody** but her (409muee76fpi)
- (21) You don’t know **any** better right (409muee76fpi)
- (22) I can’t just think of **anyone** (404mueempi)
- (23) You don’t see that **anywhere** but here (409muee76fpi)

3.5.3 Negative Concord

Negative concord is where the negative marker ‘*not*’ is accompanied by the following indefinites: *no/none*, *nobody*, *no one*, *nothing*, and *nowhere*. The following example illustrates how the ‘*not*’ (*n ’t*) negative marker and the indefinite ‘*nobody*’ double negated the sentence. Table (2) below summarizes the different forms of the variable context.

³ The speaker codes are assigned as follows: three digit code= individual speaker code, m= Manitoba (province), r/u= rural/urban (Rurality), e/m= else/Mennonite (ethnicity), e/g= English/German (First Language), two digit number= birthyear’s last 2 digits (birthyear), f/m= female/male (gender), n/p= non-professional/professional (SES), i= interview (interview file).

(24) I **don't** know **nobody** else (410muee99fni)

Table 2. Different forms of variable context

No-negation	Not-negation	Negative Concord
No, none	Not ... any	Not ... no/none
Nobody	Not ... anybody	Not ... nobody
No one	Not ... anyone	Not ... no one
Nothing	Not ... anything	Not ... nothing
Nowhere	Not ... anywhere	Not ... nowhere

3.6 Exclusion

3.6.1 Reversibility Means Acceptability

To ensure the validity of the tokens, I used Harvey's (2013) assumption that if the sentence is reversible, then it is acceptable. Therefore, when I was choosing the tokens, I tested whether the reverse form is grammatically and semantically acceptable. For instance, if the token is a 'no' form, it should be reversed to the 'any' variant and maintain the similar semantic value (Harvey, 2013, p. 11) (examples 25 and 26)

(25) It doesn't make **any** sense to me (276mreg76fni)

(26) It just made **no** sense to me (269mreg54mpi)

To have acceptable sentences when they are reversed, the *no* and *not* variants should be placed in the same predicate. According to Harvey (2013, p. 12), the use of *no* form in the subject position is categorical (example 27). In example (27) we can see that '*nobody*' is in the subject position, which is categorical, and the alternative with '*anybody*' never occurred in the corpus, similarly to previous studies (e.g., Harvey, 2013; Childs et al., 2018). Therefore, examples such as (27) were omitted from the corpus.

(27) **Nobody** really gets anything (276mreg76fni)

***Anybody** really gets anything

3.6.2 Routinized Discourse Formula

In addition to tokens which are categorical, I also excluded the construction '*I have no idea*'. The construction '*I have no idea*' can act as a fixed "routinized discourse formula" (Pichler, 2013, p. 167) which occurred in a large amount in the corpus and it never occurred with the

‘*not*’ variant. Although this construction is reversible, it could mistakenly increase the percentage of the *no*-negation variant, which would lead to a less reliable result. This construction was first included in the tokens, but they were excluded from the data to improve the reliability of the results.

Moreover, this analysis only includes the examples where ‘*not*’ and the indefinite item appear in the same clause. According to Labov (1972 a, p. 782), only within this context both the negative marker ‘*not*’ and the indefinite pronoun are subject to similar syntactic constraints. Therefore, those examples like *I don’t think*, which are also ‘a routinized discourse formula’ and grammaticalized, were excluded (Pichler, 2013, p. 167). Example (28) presents how the negative marker *not* and the indefinite item *anything* occur in separate clauses.

(28) I don't think I have w-- a—**anything** (270mreg64fni)

After removing those tokens which required exclusion, there were 654 tokens left overall. Each token was coded according to both linguistic factors and social factors. In the following section I explain each factor in detail.

3.7 Coding

3.7.1 Verb Type

After I removed those tokens which needed to be excluded, I added 654 tokens in the spreadsheet (Image 2) and I coded them based on both linguistic factors and social factors. The first linguistic factor in the present study is *verb type*, which has been found to be a significant factor governing the variation of English negation (Tottie, 1991 b; Childs, 2017). There are seven verb constructions in this study as *existential be*, *do*, *have*, *have got*, *copula be*, *lexical verb* and *prepositional phrase*.

◇ *Existential be*

The first verb type is *existential be* that consists of *existential there* plus *be*. Although *existential be* is more a construction than a verb type, it is included to investigate whether they behave differently from *copula be* (Tottie, 1991b). In the following example the *existential* construction is in **bold**.

(29) So **there's** no thesis requirement (434msee82mpi)

◇ *Do*

I separated *do* from other lexical verbs. Childs (2017) notes that although *do* is a lexical verb, its function might be different from other lexical verbs (e.g., *know*). It should be mentioned that those sentences that have *do* as an auxiliary are not included under this category. While in example (30) *do* is a lexical verb, it is an auxiliary verb in example (31). In examples (30 and 31), the verb *do* is in **bold**.

(30) And then I just- like you can't **do** anything for the entire day (414muee95fpi)

(31) I **didn't** have to have any certification (319mrme76fni)

◇ *Have*

I distinguished between *have* and *have got*. According to Childs (2017, p. 76), *have* and *have got* may behave differently in the syntax. For example, in the *have got* construction *have* can act as an auxiliary and *got* as a main verb (Berdan, 1980, p. 388). It should be noted that those examples which include *have* as an auxiliary (e.g., present perfect '*have gone*') were not included under this category. In example (32), the verb *have* is in **bold**.

(32) I don't **have** any siblings (410muee99fni)

◇ *Have Got*

As I mentioned earlier, *have got* is categorised separately from *have* in this study. Example (33) below demonstrates how *have got* (*has got* in this example) is as the main verb and proceeding the indefinite *any*. The verb *has got* in example (33) is in **bold**.

(33) She **hasn't got** any like support (406mueefpi)

◇ *Copula be*

As Tottie (1991 b) notes, cupula *be* functions differently from existential *be*. Hence, I separated these two and considered a new category for copula *be*.

(34) And he had somebody else right away so it's no big deal. (418muee60fni)

(35) They're like "sweetheart you're *not* going anywhere". (437muee86fpi)

◇ *Lexical Verbs*

Lexical verbs in this study are separated from non-auxiliary *have*, *do* and *be*. The following examples are some of the lexical verbs shown in **bold**.

(36) It doesn't **mean** anything to me (429muee56mpi)

(37) I don't **follow** any recipe (409muee76fpi)

(38) He **wanted** nothing to do with him (407mueemi)

(39) We both **knew** no English (254mreg52fpi)

◇ *In PP*

The last construction is within *prepositional phrase* (PP). “Although PPs do not feature negative marking on a verb, *any/no* do alternate in this environment” (Childs et al., 2018, p. 9). Therefore, the prepositional set considered for this study is *with* and *without*, which can carry negation on the prepositional head (Harvey, 2013). The following examples illustrate the case.

(40) The second year I'll start it **with** almost **no** money (413muee92mni)

(41) I walked those whole two miles **without** meeting anybody(322mrmg27fni)

3.7.2 Indefinite Item

Indefinite item is the second linguistic factor in this study. According to the literature (e.g., Tottie, 1991b; Smith, 2001), indefinites can also impact the frequency of *not*-negation, *no*-negation, and negative concord. The indefinite item is coded as *anything*, *nothing*, *anybody*, *nobody*, *anyone*, *no one*, *anywhere*, *nowhere*.

◇ *Anything, Nothing*

(42) There wasn't **anything** exciting (413muee92mni)

(43) They just count one two three four five and then there's **nothing** (413muee92mni)

◇ *Anybody, Nobody*

(44) I don't have **anybody** (410muee99fni)

(45) And there was **nobody** on the streets (431muee61mpi)

◇ *Anyone, No one*

(46) I can't just think of **anyone** (404mueempi)

(47) There was **no one** else there (433muee81fni)

◇ *Any, No, None*

(48) There weren't **any** performances that I was particularly interested (405mueefpi)

(49) She has **no** friends (406mueefpi)

(50) They were using an English word because there was **none** (270mreg64fni)

◇ *Anywhere, Nowhere*

(51) I won't even have to drive them **anywhere** (319mrme76fni)

(52) There's **nowhere** else in Canada (404mueempi)

Image 2. Example of tokens in Excel spreadsheet

1	no	nah gonna sit in the cafe do thing	do	nothing
2	not	ceremony that wasn't actually thing	be	anything
3	not	you don't know thing about the world or thing and I- I mean I don't	lexical verb	anything
4	not	we didn't have thing to do really	have	anything
5	no	um there 's literally almost thing to do you could go bowling	existential	nothing
6	no	we have no real like ' good shopping	have	any, no/none
7	not	our grapes didn't grow any grapes this year so ... why ? I don't know	lexical verb	any, no/none
8	not	I-don't-know I didn't think any of them were that well done	lexical verb	any, no/none
9	not	yeah other than that I can't think of any events in Winkler	lexical verb	any, no/none
10	not	yeah he talked to you like you were a small child that didn't unders	lexical verb	anything
11	not	I was like , I could get there from the gym door , but I can't get the	lexical verb	anywhere
12	not	uh my oldest sister Danielle didn't like me but she didn't like body	lexical verb	anybody
13	concord	and then in grade twelve I was like " I ain't got no time to take pre	have got	any, no/none

3.7.3 Gender

Gender is the first social factor which according to sociolinguistic studies correlate with linguistic variation (see section 2.3.2). The variable *gender* was coded in a binary way as ‘male’ and ‘female’. Although the binary classification is not a full representation of gender, the corpus as collected only stratified for male and female, and so this research is constrained by its collection. In total, 37 male speakers and 61 female speakers were interviewed in this research.

3.7.4 Generation

The second social factor under investigation is the speakers' *generation*. I chose this factor because it enables me to investigate the speech of speakers born at different points in time and to explore whether a change has happened. Since my study is synchronic, my analysis uses the apparent-time construct (Tagliamonte, 2012, p. 43). Previous studies on negation mostly categorized age/generation as older, middle-aged and/or younger (Childs, 2017, Harvey, 2013). However, in this study I coded my data based on Generational Cohorts. Inglehart (1977) introduced the theory of Generational Cohort, in which individuals who share similar social, economic, political and cultural experiences may also share similar beliefs, value, attitudes and behaviours throughout their lives. Therefore, any cohort includes specific priorities and distinctive behaviours and attitudes that may be preserved over their lifetime (Jackson et al., 2011). Schewe et al. (2000) suggest that a generation can be 20-25 years in length, but a cohort might vary according to external factors that define it. The specific years denoting generational cohorts might differ slightly from scholar to scholar, but they largely overlap. For example, Adams and Gay (2019) displayed their cohort as Silent generation (before 1946), Baby Boomers (1946-1964), Generation X (1965-1980) and Millennials (1981-1994) (p. 17). For this study, I labeled generations as Silent Generation (1925-1945), Baby Boomers (1946-1964), Generation X (1965-1978) and Millennials (1979-2000). The following table displays the generation cohorts in this research.

Table 3. *Distribution of speakers according to generation cohort*

Cohort	Birth year	Number of speakers
Millennials	1979-2000	38
Generation X	1965-1978	20
Baby Boomers	1946-1964	23
Silent Generation	1925-1945	17

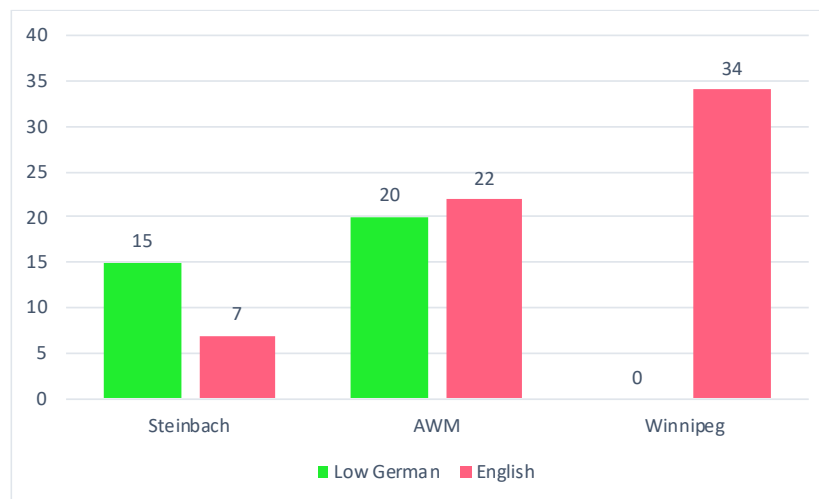
3.7.5 Rurality

The third social factor in this study is *rurality*. Each speaker was coded as *rural* or *urban*. Interviews were chosen from two rural areas (Steinbach and AWM) and one urban area (Winnipeg). The difference between rurality and urbanity were determined based on the population of the speakers' residence. All Winnipeg participants were labeled as urban, while all Steinbach and AWM speakers were labeled as rural. Overall, 64 speakers are from the rural areas and 34 speakers are from the urban area.

3.7.6 First Language

The fourth social factor in this study is *first language* which was coded as either *German* or *English*. Figure (1) shows the distribution of Low German and English speakers per locality.

Figure 1. Distribution of Low German and English speakers per locality



3.7.7 Religious Affiliation

The fifth social factor in this research is *Religious Affiliation*. I want to investigate how religious affiliation of LGMs can affect language variation. After listening to interviews, including the ethnic identity questionnaire, which was administered as part of the interview, a score of 1-3 was assigned, where 3 is the highest degree of Mennonite identity. These scores were assigned based on qualitative measures of self-identification, churchgoing, cultural knowledge, and Low German language proficiency (Hoffman & Walker, 2010). It should be mentioned that the ethnic questionnaire was only given to Steinbach and AWM residents, where their Mennonite identity was specifically sought (All the Steinbach speakers are also Mennonite). There was no ethnic questionnaire given for the ethnically undifferentiated Winnipeg speakers. Table (4) displays the distribution of the rural speakers based on their Mennonite identity.

Table 4. The distribution of the rural speakers according their Mennonite identity

Mennonite Identity	No
3	40
2	12
1	12

3.7.8

Socioeconomic Status

The final social factor considered in this study is SES. The socioeconomic metric was calculated by combining education and occupation. The occupation scale is between 1 and 6 using the National Occupational Classification Matrix⁴, as found in the table (5), while education is shown in table (6). The combined score of education and occupation is between 2 and 12 and determines the speaker's SES: scores of 2-6 are designed *non-professional* and scores of 7-12 are designed *professional*. As it is shown in table (5), a score of 1-6 is assigned based on the occupation of the speakers, with 6 assigned for upper management and 1 for unemployed. Similarly for education, a score from 1 to 6 is considered for each level, with 6 assigned for graduate degree or professional school and 1 for no high school diploma (table 6). Overall, there are 50 speakers under professional category and 48 speakers under the non-professional category.

Table 5. Socioeconomic metric for occupation

Unemployed	1pt
Skill level D (cashiers, security guards, cleaners, laborers, etc.)	2pts
Skill level C (clerical assistants, healthcare assistants, sales representative, drivers, etc.)	3pts
Skill level B (clerical supervisors, lab technicians, paralegals, sales supervisors, chefs, trades supervisors, etc.)	4pts
Skill level A (accountants, lawyers, doctors, librarians, teachers)	5pts
Upper management	6pts

⁴(<https://noc.esdc.gc.ca/Home/Welcome/10fef56a9c8d48a8a34189d97a21e681?GoCTemplateCulture=en-CA>)

Table 6. *Socioeconomic metric for education*

No high school diploma	1pt
High school diploma	2pts
Apprenticeship certificate, trade certificate, diploma	3pts
Some university, college certificate or university certificate below bachelor level	4pts
University degree: bachelor level	5pts
Graduate degree or professional school	6pts

3.8 Quantitative Analysis

Quantitative analysis is essential for studies with variationist sociolinguistic approaches (Tagliamonte, 2006, p. 12). In this study, I use quantitative analysis to investigate the correlation between English negation and linguistic/social factors. The two main methods chosen for this study are relative frequency and mixed-effect logistic regression.

3.8.1 Relative Frequency

Distributional analysis is commonly used in variationist sociolinguistics as it can demonstrate how a linguistic variant is affected by independent factors i.e., linguistic, and social factors (Tagliamonte, 2006, p. 193). I used R to calculate the distribution of variants. In addition to calculating the frequency, which illustrates how variation is affected by different factors, I used mixed-effect logistic regression analysis. The regression analysis can show how different independent variables can simultaneously affect the variation.

3.8.2 Regression Analysis

Regression analysis techniques were primarily utilized in variationist sociolinguistics with the Varbrul software in the 1970 (Rousseau & Sankoff, 1978; Sankoff & Labov, 1979). The goal of these techniques was to “describe the combined effect of all the features in the environment on the application probability of a rule” (Rousseau & Sankoff, 1978, p. 58). Recently, variationist sociolinguists shifted from fixed-effect models to mixed-effect logistic regression in the statistical program R (R Core Team 2014).

Mixed-effect models have some advantages over the fixed-effect models. First, fixed-effect models only include fixed factors like most of the internal factors (e.g., subject type) or external factors (e.g., age, gender, etc.). They cannot measure the random effects like the individual speaker. Fixed-effect models consider the tokens as independent findings while the

number of a token produced by an individual speaker is different from each other, which means that the data is nested (Johnson, 2009). Mixed-effects models, on the other hand, include the speakers as a random effect and the factors as fixed-effects. With this analysis, the results are more accurate, and it can estimate p-values (Gorman & Johnson, 2013), which improve the researcher's confidence in the significance of both external/social and linguistic factors (Walker, 2013, p. 454).

I used mixed-effect logistic regression in the statistical program R. The package that I used in R is (*lmerTest*). In all my models I needed to use an independent variable as a reference level which acts as a base level to which all other levels of the variable are compared (Levshina, 2015, p. 146). The following is the model that I used for my mixed-effect logistic regression.

```
modell= glmer(negator=="not" ~ verbconstruction + generation + gender + firstlanguage + location + (1|SpeakerID), data=negation7, family="binomial")
```

The strength of each level is shown in as “estimate” which is a value from $-\infty$ to $+\infty$ calculated in log-odds (Johnson, 2009, p. 361). While the positive estimate illustrates that the level favours the dependent variable, the negative estimate shows a disfavours effect. The intercept estimate shows the mean log odds for all of the reference levels of the factors (Tagliamonte & Baayen, 2012, p. 149). Another essential comparison provided by these models are the level of significance for each level (Tagliamonte, 2006, p. 236). The significance is shown as p-values which “tell us whether the coefficient is significantly different from zero” (Baayen, 2008, p. 89).

My models also include two other sections as Standard Error and Z-values. The standard error means “a measure of the uncertainty about the estimate” (Tagliamonte & Baayen, 2012, p. 149) and Z-values is “dividing the estimate by its standard error” to calculate the p-value (Tagliamonte & Baayen, 2012, p. 149).

3.9 Summary

In the current study, the speech of a total of 98 speakers resided in Winnipeg, Steinbach and AWM was investigated based on sociolinguistic interview with a total of 654 tokens. Six social factors, *gender*, *generation*, *rurality*, *first language*, *SES*, and *religious affiliation*, and two

linguistic factors, *verb type* and *indefinite item* were investigated. The following section presents the findings of the study.

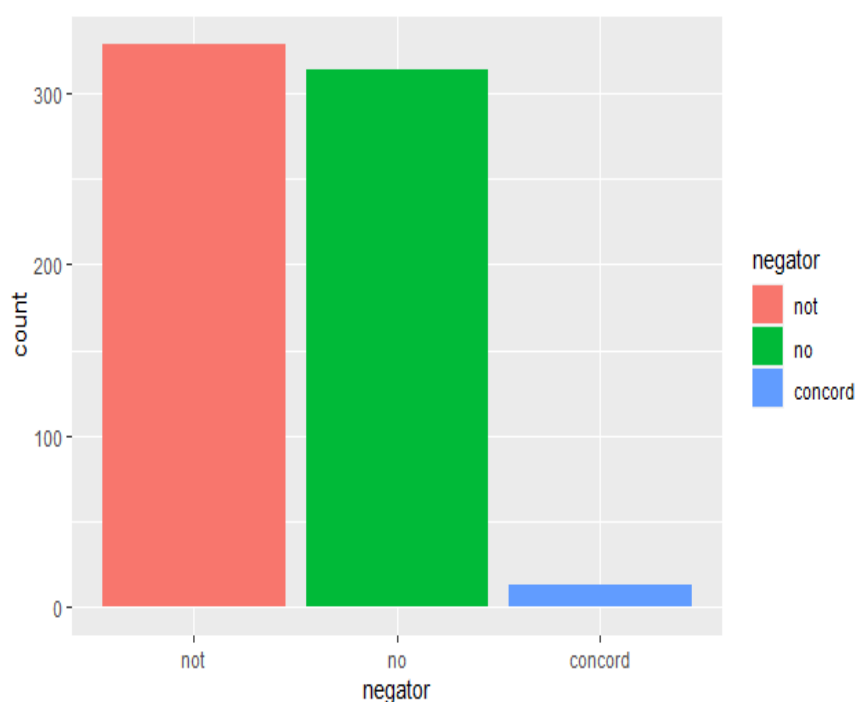
Chapter 4: Results

In this section, I present the results of the analysis of *no*-negation, *not*-negation and negative concord in three different locations: AWM, Steinbach and Winnipeg. First, I will explain the overall distribution (section 4.1) and the distribution of the variants for both social factors (4.2) and linguistic factors (section 4.3). Subsequently, I discuss the statistical analysis (section 4.4). Lastly, I give a brief summary of the results (section 4.5).

4.1 Overall Distribution

According to figure (2), the overall frequency of *no*-negation and *not*-negation is relatively similar in the data set, while negative concord is much rarer. Whereas *not*-negation forms 50.15% of the whole data, this amount is slightly lower for *no*-negation (47.86%). Negative concord forms only 1.99% of the whole dataset. The frequency of *not*-negation and *no*-negation is very close to the rate of these variants in Belleville and Toronto (Childs et al., 2018).

Figure 2. The overall distribution of *no*-negation, *not*-negation and negative concord.



	N	%
No	313	47.86
Not	328	50.15
Concord	13	1.99
Total	654	

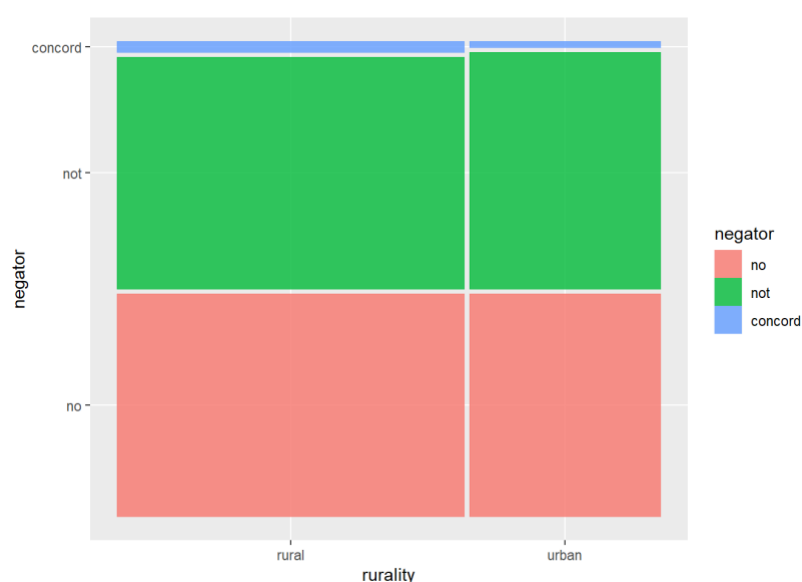
In the following sections, I will explain the distribution of the use of the variants according to social factors (*generation, gender, SES, rurality, religious affiliation and first language*) and linguistic factors (*verb type and indefinite item*).

4.2 Social Factors

4.2.1 Rurality

Rurality is the first social factor that is analyzed in the current study and the overall data is divided into *rural* and *urban*. The rural areas include AWM and Steinbach and the urban area includes Winnipeg. Figure (3) demonstrates the distribution of *no*-negation, *not*-negation and negative concord according to ‘rurality’.

Figure 3. Distribution of *no*-negation, *not*-negation, and negative concord according to rurality

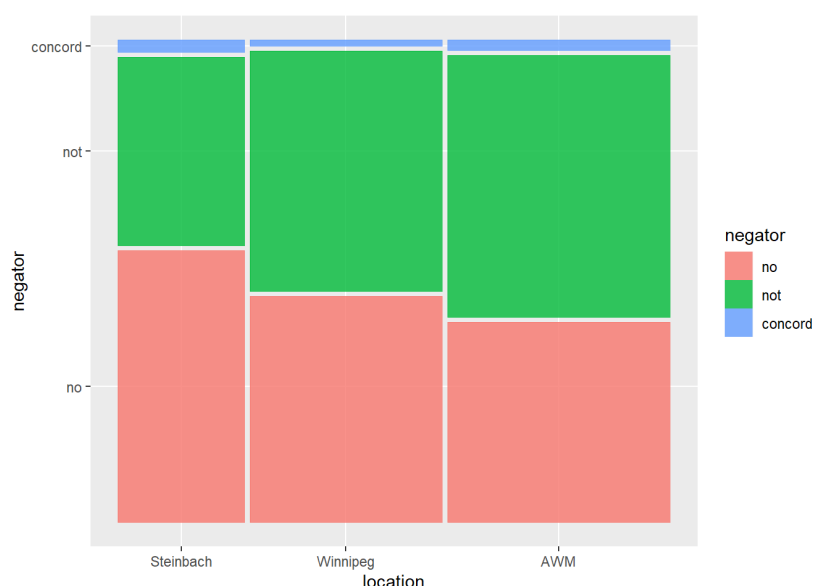


	Rural	Urban
No	47.87% (202)	47.84% (111)
Not	49.76% (210)	50.86% (118)
Concord	2.37% (10)	1.29% (3)
Total	422	232

The distribution of variants according to *rurality* reveals that this factor does not have any noticeable effect on the occurrence of negation in the data, i.e., both rural and urban areas appear to behave similarly with regards to English negation. Although the overall frequency of negative concord in both areas is extremely low, we can note that the rural area usage of negative concord is nearly twice as frequent as urban. In order to check whether individual

locations might be factors in negatin choice, rather than simply rural versus urban, I also analyzed the data according to location. The following figure illustrates the distribution of *no*-negation, *not*-negation and negative concord per location.

Figure 4. Distribution of *no*-negation, *not*-negation, and negative concord according to location



	AWM	Steinbach	Winnipeg
No	42.38% (114)	57.52% (88)	47.84% (111)
Not	55.39% (149)	39.87% (61)	50.86% (118)
Concord	2.23% (6)	2.61% (4)	1.29% (3)
Total	269	153	232

The distribution of the variants per location reveals that Steinbach has the highest rate of *no*-negation, followed by Winnipeg and then AWM. It is interesting to note that although both AWM and Steinbach are rural, they appear to show opposite tendencies from one another, with Winnipeg in the middle . AWM area has the highest rate of *not*-negation, while Steinbach has the highest rate of *no*-negation. The statistical analysis we ascertain whether location has a significant impact on the variation of English negation in Manitoba.

4.2.2 Generation

To explore whether there is evidence for ongoing change among speakers, I categorized the data as *Silent Generation* (1925-1945), *Baby Boomers* (1946-1964), *Generation X* (1965-1978) and *Millennials* (1979-2000).

Figure 5. Distribution of *no*-negation, *not*-negation and negative concord according to generation.



	silent generation	baby boomers	generation X	millennials
No	55.30% (73)	52.94% (72)	41.67% (55)	44.49% (113)
Not	42.42% (56)	42.65% (58)	57.58% (76)	54.33% (138)
Concord	2.27% (3)	4.41% (6)	0.76% (1)	1.18% (3)
Total	132	136	132	254

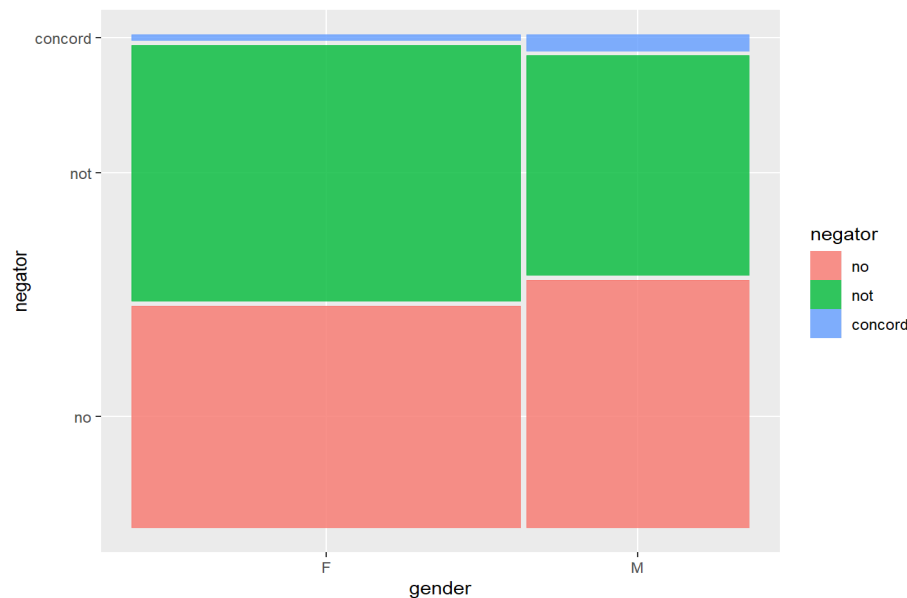
We can see from figure (5) that the Silent Generation has the highest rate of *no*-negation among all generations (55.30%). This relative frequency is slightly lower for Baby Boomers (52.94%) and it decreases to 41.67% for Generation X. On the other hand, the relative frequency of *not*-negation is higher for Generation X (57.58%) and it declines to 42.65% and 42.42% for Baby Boomers and Silent Generation respectively. If according to Tottie (1991a, b), there is a change in progress from the older variant (*no*-negation) to the newer variant (*not*-negation), the result of among older generations can suggest that there is evidence of change in progress.

However, the Millennials do not follow this pattern, and the rate of *not*-negation for this generation comparing to Generation X is slightly lower (54.33%). Moreover, *no*-negation in this group is moderately higher than Generation X (44.46%). What that stands out in the figure is the split between the older generations, *Silent Generation* and *Baby Boomers*, and younger generation, *Generation X* and *Millennials*. As we can see, the older generation use more *no*-negation and younger generations tend to use more *not*-negation. Moreover, negative concord is more frequent among older generations than younger generations. In section (4.4) we will see from the statistical analysis whether this factor has relative strength.

4.2.3 Gender

The next social factor that is analyzed in the current study is *gender*, which in this sample includes only male (M) or female (F). Figure (6) is the distribution of *no*-negation, *not*-negation and negative concord according to gender.

Figure 6. Distribution of *no*-negation, *not*-negation and negative concord according to gender



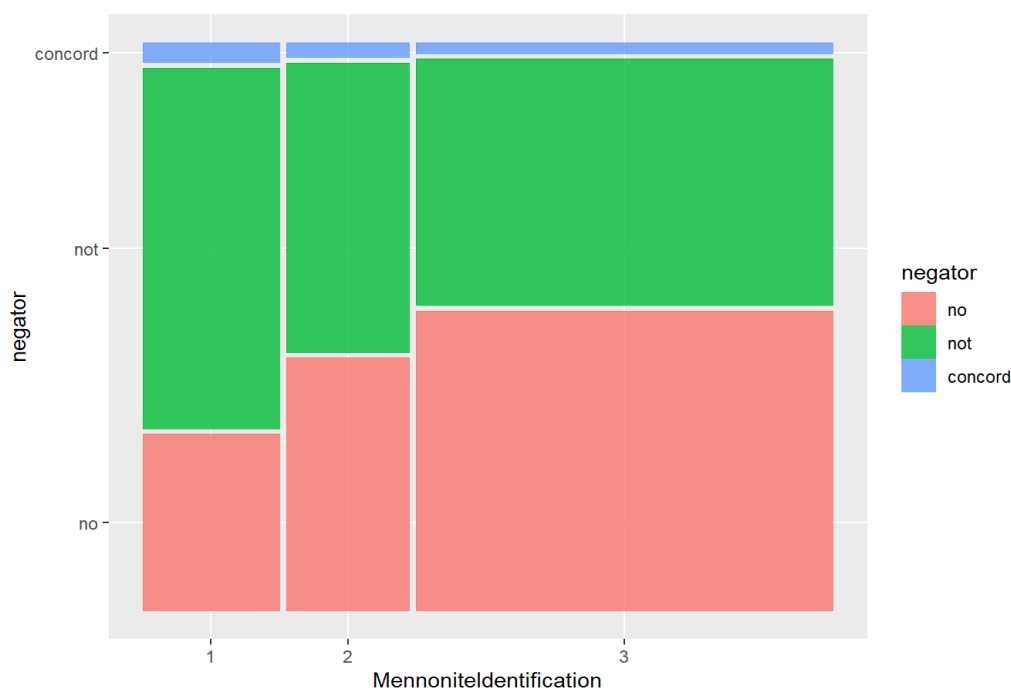
	F	M
No	48.48% (191)	51.69% (122)
Not	50.25% (198)	44.92% (106)
Concord	1.27% (5)	3.39% (8)
Total	394	236

Figure (6) compares the result obtained from different genders according to the use of *no*-negation, *not*-negation and negative concord. As figure (6) shows, women are split nearly equally between *not*-negation and *no*-negation, with males using more negative concord and slightly disfavours *not*-negation. Similarly, Childs et al. (2018) in their study illustrated that there is a similar trend in Belleville, North East England and York. As I mentioned earlier, *not*-negation is newer than *no*-negation and females accelerate in their use of a new form while men lag behind (Tagliamonte, 2012, p. 32). Therefore, it is expected that female speakers would have slightly higher rate of *not*-negation.

4.2.4 Religious Affiliation

Religious affiliation is the next social factor that is analyzed in this study, which is indexed as ‘Mennonite Identification’ (hereafter, MI). Figure (7) provides an overview of how the speakers use different variants according to their Mennonite identity index.

Figure 7. Distribution of *no*-negation, *not*-negation, and *negative concord* according to the speakers’ religion



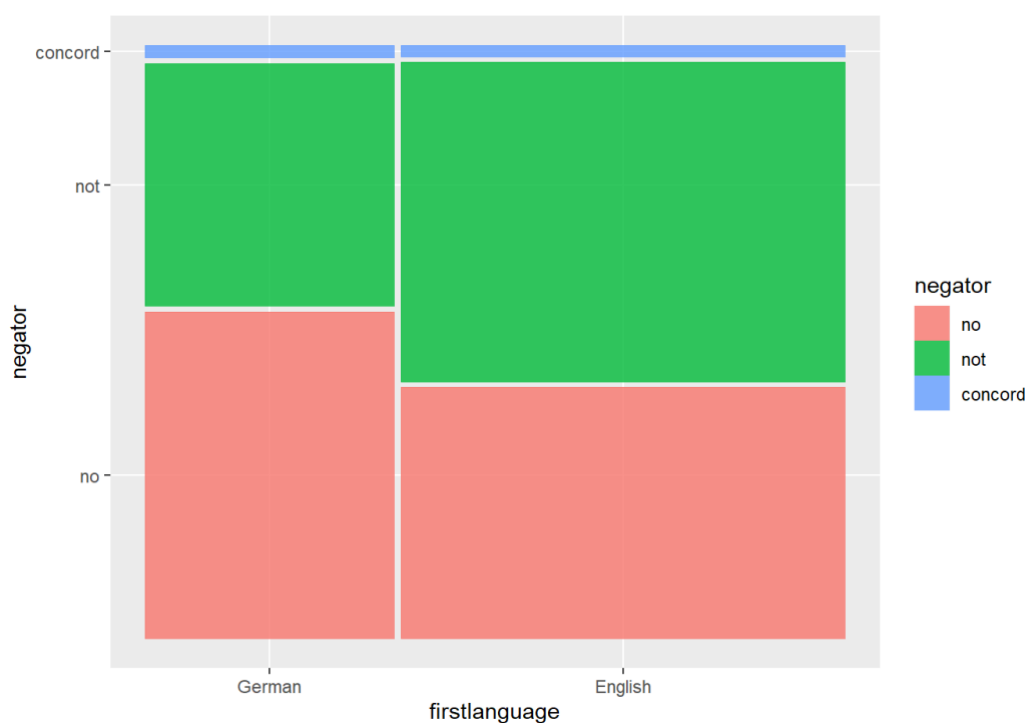
	MI3	MI2	MI1
No	55.34% (140)	47.95% (35)	37.50% (27)
Not	42.69% (108)	49.32% (36)	58.33% (42)
Concord	1.98% (5)	2.74% (2)	4.17% (3)
Total	253	73	72

In this study, recall speakers were given a number with respect to how closely tied to their religion they were, with 3 meaning they have stronger ties and 1 representing lesser ties (see section 3.7.7). The distribution of variants according to MI seems to reveal that this factor has an important impact on the choice of negation. As the figure above illustrates, speakers who have stronger ties to their religion (MI3) most prefer *no*-negation (55.34%), and this rate declines with lower ties, slightly lower for MI2 (47.95%) and MI1 (37.50%), respectively. This result illustrates that similar to other studies (e.g., Baker & Bowie, 2009), religious affiliation may be correlated with linguistic features. While the more religious group (MI3) favours *no*-negation, the less religious group (MI1) disfavours this variant. We will see in section (4.4) whether this factor has relative strength in the statistical analysis.

4.2.5 First Language

This section investigates the effect of speakers' first language on the choice of variants. The speakers' first languages in this study include Low German and English. Figure (8) illustrates the distribution of *no*-negation, *not*-negation and negative concord according to the speaker's first language.

Figure 8. Distribution of *no*-negation, *not*-negation, and negative concord according to speakers' L1

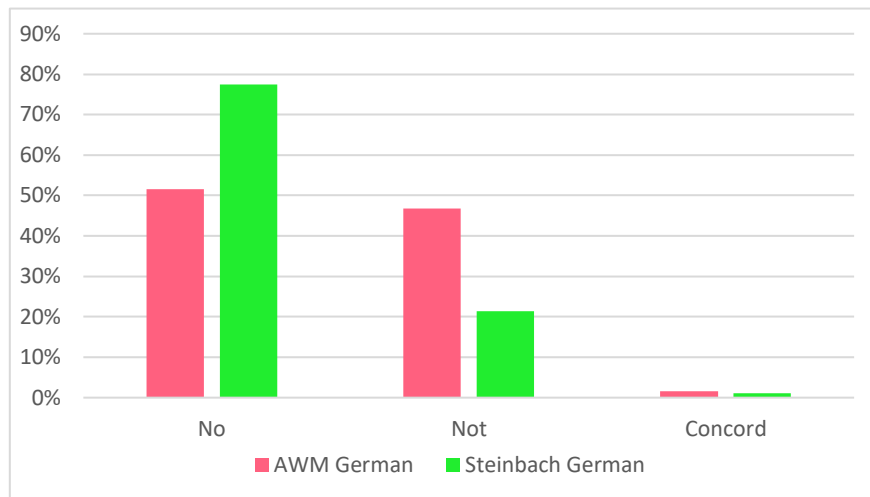


	Low German	English
No	56.17% (132)	43.20% (181)
Not	41.70% (98)	54.89% (230)
Concord	2.13% (5)	1.91% (8)
Total	235	419

The distribution of variants based on *first language* reveals that this factor appears to have an important effect on the choice of negation. As figure (8) shows, *not*-negation is somewhat preferred among English L1 speakers (54.89%), and somewhat disfavoured (41.70%) among Low German L1 speakers. Instead, the more conservative variant (*no*-negation) is more frequent among Low German L1 speakers (56.17%). The relative frequency

of negative concord is similar for both English and Low German groups, (1.91% and 2.13% respectively). Figure (9) shows how these Low German L1 groups prefer negation.

Figure 9. Distribution of no-negation, not-negation, and negative concord among Low German L1 speakers



	AWM	Steinbach
	German	German
No	51.64% (63)	77.53% (69)
Not	46.72% (57)	21.35% (19)
Concord	1.64% (2)	1.12% (1)
TOTAL	122	89

As we can see in figure (9), *no*-negation among Low German speakers in Steinbach is much more frequent than in AWM, at 77.53% and 51.64% respectively. This difference might be related to other factors than first language which will be discussed later.

4.2.6 Socioeconomic Status

The next social factor in this study is SES which is divided into *professional* and *non-professional* (See section 3.7.8).

Figure 10. Distribution of *no*-negation, *not*-negation, and negative concord according to SES



	Professional	Non-professional
No	47.18% (167)	48.57% (136)
Not	51.13% (181)	48.93% (137)
Concord	1.69% (6)	2.50% (7)
Total	354	280

The distribution of variants according to SES suggests that this factor does not have an important impact on the variation of negation in this study. Figure (10) shows that the rate of *no*-negation (47.18% vs. 48.57%) and *not*-negation (51.13% vs 48.93%) is nearly identical for professionals and non-professionals respectively. The rate of negative concord, although low across the board, is almost twice for non-professionals.

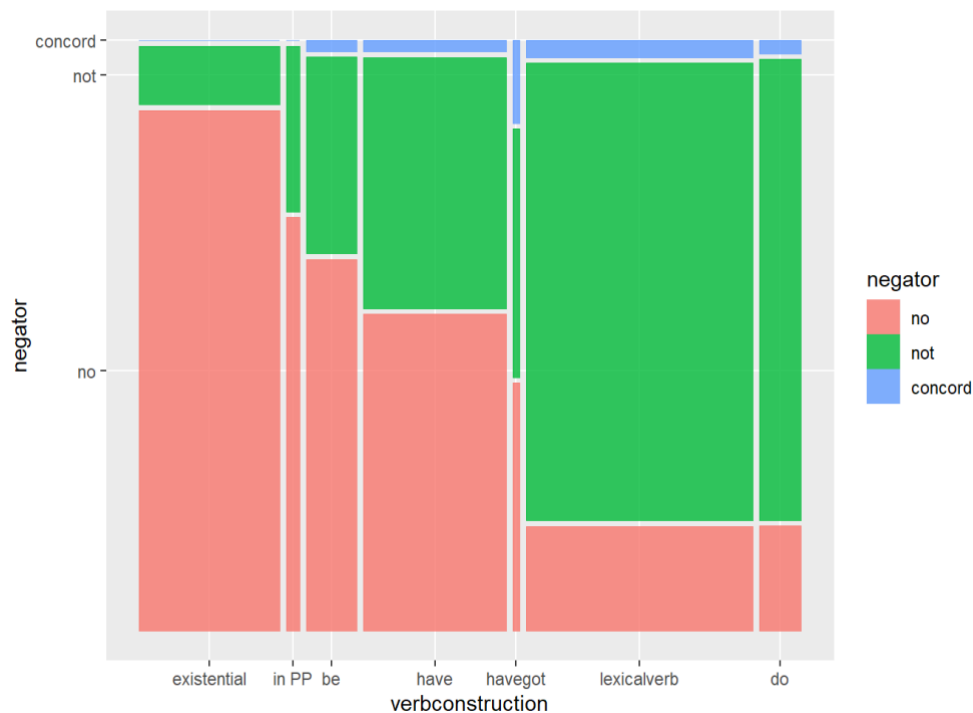
Overall, the distributional analysis of social factors showed that some social factors appeared to be meaningful which are *generation*, *first language* and *religious affiliation*. In statistical analysis (section 4.4) we will see whether these factors have any significant correlation with the variation of English negation in Manitoba. The following sections provide an overview related to the impact of linguistic factors on English negation in Manitoba.

4.3 Linguistic Factors

4.3.1 Verb Type

In this study, the first linguistic factor is *verb type*. According to previous studies, *verb type* is the most robust factor impacting the variation of English negation (Tottie, 1991 a , b, Childs, 2017, Childs et al., 2018). Figure (11) provides information of *no*-negation, *not*-negation and negative concord according to verb type in the data.

Figure 11. Distribution of *no*-negation, *not*-negation, and negative concord according to verb type



	Existential	In PP	Be	Have	Have got	Lexical verb	Do
No	92.59% (75)	71.4% (10)	63.46% (33)	54.67% (82)	42.86% (3)	18.07% (43)	18.18% (8)
Not	7.41% (6)	28.5% (4)	34.62% (18)	44.33% (65)	42.86% (3)	78.99% (188)	79.55% (35)
Concord	0	0	1.92% (1)	2 % (3)	14.29% (1)	2.94% (70)	2.27% (1)
Total	81	14	52	150	7	238	44

Figure (11) demonstrates that the use of *no*-negation and *not*-negation is remarkably different according to the verb type. *Existential* verbs have the highest rate of *no*-negation

(92.59%), followed by *PP* construction (71.43%), *be* (63.46%) and *have* (54.67%), respectively. The rest of the constructions have the lowest rate of frequency of *no*-negation, meaning they have a tendency to occur instead with *not*-negation. But what is the possible reason for this difference? Tottie (1991 b) categorized existential *be*, *have* and copula *be* as high-frequency constructions, based on a frequency dictionary of modern English. She points out that the frequency of usage is an important factor in using *no*-negation. Therefore, there is no surprise that in the present study, high frequency verbs also prefer *no*-negation.

Lexical verbs and *do*, on the other hand, tend to collocate with *not*-negation. Tottie (1991 b) points out that since lexical verbs are less frequent with *no*-negation, they can undergo the process of change and take *not*-negation. However, it doesn't mean that lexical verbs do not appear with *no*-negation at all. The following examples show that *no*-negation was also possible with lexical verbs.

(53) We both knew **no** English. (254mreg52fpi)

(54) I worked **nothing** in the last week. (318mrme82mni)

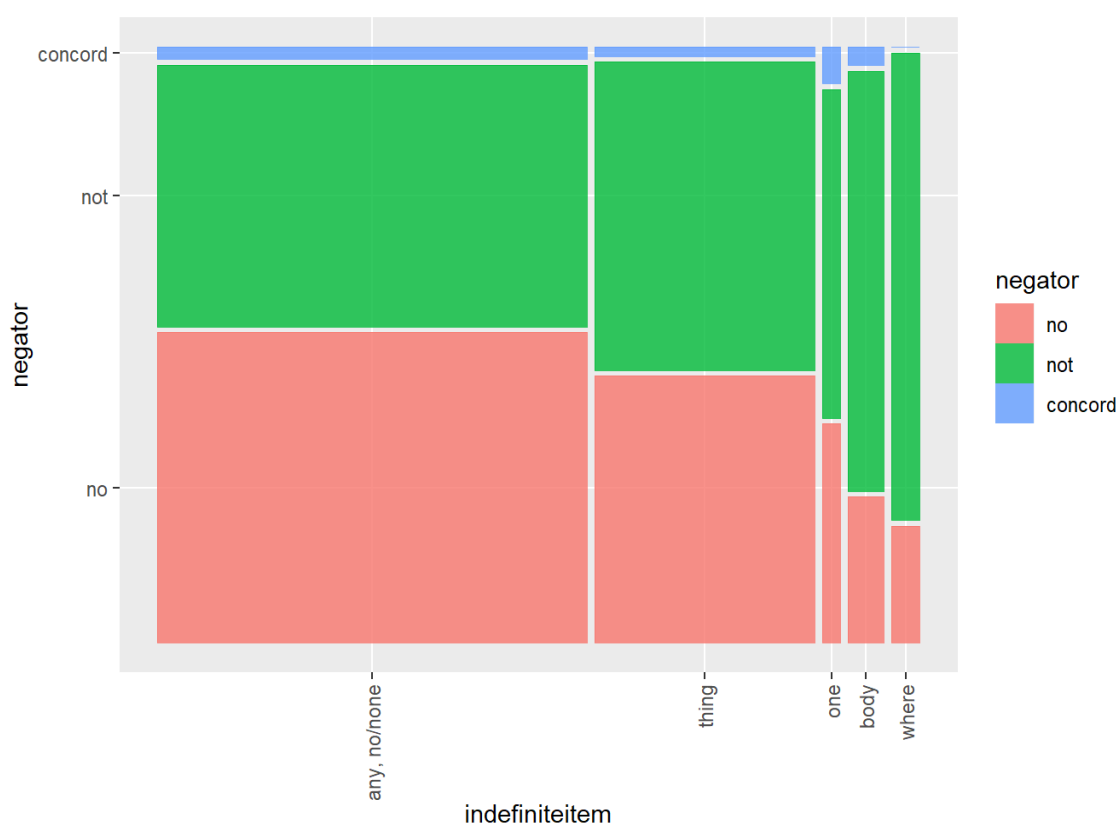
(55) That was the only school that offered **no** color cats. (409muee76fpi)

Regarding PP constructions, Childs et al. (2018) noted that “PPs are positioned between lexical and functional verbs in term of their propensity to take *no*-negation” (p. 11). While in the current study PP appears to favour *no*-negation, Childs et al. (2018) in their study in Toronto and Belleville found that this construction tends to occur with *not*-negation. In the statistical analysis we will see whether this construction has relative strength in this study. Figure (11) also illustrates that the rate of *have got* with negative concord is (14.29%) and is followed by lexical verbs (2.94%), *do* (2.27%), *have* (2.00%), and *be* (1.92%). It should be mentioned that there was not any example of negative concord appeared with *existential* construction and PP construction in the whole data set.

4.3.2 Indefinite Item

The second linguistic factor in this study is *indefinite item*. Previous studies show that this linguistic factor can have an impact on the choice of negation (Tottie, 1991 b; Smith, 2001; Varela Pérez, 2014).

Figure 12. Distribution of *no*-negation, *not*-negation, and negative concord according to the indefinite item.



	any, no/none	-thing	-one	-body	-where
No	53.13% (204)	45.69% (90)	37.50% (6)	25% (8)	20% (5)
Not	44.79% (172)	52.79% (104)	56.25% (9)	71.88% (23)	80% (20)
Concord	2.08% (8)	1.52% (3)	6.25% (1)	3.13% (1)	0
Total	384	197	16	32	25

Figure (12) presents that the indefinite *any, no/none* has the highest rate for *no*-negation (53.13%). This rate slightly decreases for *-thing* (45.69%), *-one* (37.50%), *-body* (25%) and *-where* (20%) respectively. Similarly, Childs (2017) found that *any, no/none* had the highest frequency with *no*-negation in British dialects. On the other hand, *not*-negation in this research has a strong tendency to occur with *-where* (80%), which declines to 71.88% (*-body*), 56.25% (*-one*), 52.79% (*-thing*) and 44.79% (*any, no/none*). What stands out in the figure is that

negative concord highly favours the indefinite *-one* (6.25%). This frequency decreases to 3.13%, 2.08% and 1.52% for *-body*, *any*, *no/none* and *-thing* respectively. In order to see whether there is an interaction between these two linguistic factors, I will present a cross-tabulation in the next section.

4.3.3 Cross-Tabulation Between Verb Type and Indefinite Item

Table (7) illustrates the number of tokens for indefinite item with each verb construction. The final column shows the percentage of a specific verb construction that occur with a particular indefinite item. For example, 53.46% is the total number of tokens of *existential be* appearing with *any*, *no/none*.

Table 7. *Cross-tabulation of indefinite item and verb type*

	No-negation	Not-negation	Negative Concord	Total N	% of tokens within verb type
Existential					
<i>any, no/none</i>	7	0	0	7	53.46
<i>-thing</i>	6	3	0	9	13.92
<i>-one</i>	0	2	0	2	0
<i>-where</i>	0	0	0	0	0
<i>-body</i>	0	1	0	1	2.53
BE					
<i>any, no/none</i>	30	9	1	40	93.02
<i>-thing</i>	12	10	0	22	51.16
<i>-one</i>	1	0	0	1	2.33
<i>-where</i>	1	5	0	6	13.95
<i>-body</i>	2	0	0	2	4.65
HAVE					
<i>any, no/none</i>	67	49	4	120	83.33
<i>-thing</i>	17	14	0	31	69.77
<i>-one</i>	0	1	0	1	0
<i>-where</i>	1	2	0	3	0
<i>-body</i>	1	4	0	5	0
HAVE GOT					
<i>any, no/none</i>	1	2	1	4	66.67
<i>-thing</i>	1	0	0	1	16.67
<i>-one</i>	0	0	0	0	0
<i>-where</i>	0	1	0	1	16.67
<i>-body</i>	0	0	0	0	0
DO					
<i>any, no/none</i>	2	6	0	8	18.60
<i>-thing</i>	6	23	1	30	69.77
<i>-one</i>	0	0	0	0	0
<i>-where</i>	0	0	0	0	0

<i>-body</i>	0	0	0	0	0
LEXICAL VERBS					
<i>any, no/none</i>	23	91	2	116	53.46
<i>-thing</i>	24	48	1	73	33.64
<i>-one</i>	0	0	1	1	0.46
<i>-where</i>	1	10	0	11	5.07
<i>-body</i>	0	18	1	19	8.76
PP					
<i>any, no/none</i>	7	0	0	7	58.33
<i>-thing</i>	6	3	0	9	75.00
<i>-one</i>	0	2	0	2	16.67
<i>-where</i>	0	0	0	0	0
<i>-body</i>	0	1	0	1	8.33

According to table (7), verb types that favour *no*-negation (*existential, have, have got and be*) frequently appear with the same type of indefinite item, i.e., *any, no/none* and *-thing*. On the other hand, *lexical verbs* and *do* that tend to frequently occur with *not*-negation pattern dissimilarly from each other and they don't tend to take the same types of indefinite items. While *lexical verbs* frequently tend to take *any, no/none* (53.4%), *do* frequently occurs with *-thing* (75%). Therefore, there is does not appear to be any correlation between the verb type and the type of indefinite item that the verb chooses.

4.4 Statistical Analysis

Thus far, the distributional analysis reveals that some factors have an impact on the form of negation. These factors include *verb type, indefinite item, generation, religious affiliation, and first language*. To determine which of these factors has a significant effect on the negative construction used, I applied a mixed-effect logistic regression analysis using the R package (*lmerTest*) (See section 3.8.2) and followed Childs (2017) to show the results for both *no*-negation and *not*-negation in the tables. The distributional analysis illustrated that negative concord had very low rate of frequency. Therefore, this variant is not included in the statistical analysis. In section (4.3.1), we observed that some verbs patterns similarly. For example, some verb constructions like *have*, *existential be*, *copula be* tend to occur with *no*-negation. On the other hand, *lexical verbs* and *do* favoured appearing with *not*-negation. The only construction that tended to occur equally with both *not*-negation and *no*-negation was *have got*. Therefore, for the statistical analysis I collapsed the verb types that patterned similarly into a combined category, which gave two categories, i.e., *functional verbs* and *lexical verbs*. *Lexical verbs* consists of all lexical verbs plus *do*, which tend to occur with *not*-negation, while *functional*

verbs include *have*, copula *be* and existential *be*, that frequently occurred with *no*-negation. I also had two more categories *PP* and *Have got*. Although *PP* preferred to appear with *no*-negation, I put it in a separate category because it is not a functional verb. Finally, since *have got* equally occurred with both *no*-negation and *not*-negation I put it in its own category.

The distributional analysis showed that both indefinite item and verb type have an important impact on *no*-negation and *not*-negation. To determine which variable(s) show significant effects, I originally included only these two linguistic factors in a mixed-effect logistic regression model. The result of this model illustrated that *verb type* was strongly significant while *indefinite item* showed less significance (0.0231). When I made a model for both linguistic factors and social factors, the model failed to converge because it had too many predictors for the amount of data I had. Therefore, I removed indefinite item from my statistical analysis to have a more accurate result. As observed in section (4.2), some of the social factors had a more robust effect on the choice of negation like *generation*, *first language location* and *religious affiliation*. Therefore, I removed factors like *rurality*, and *SES* from my mixed-effect logistic regression analysis and I included *verb type*, *gender*, *generation*, *location* and *first language* as fixed-effects, and speakers as a random effect (table 8).

Religious affiliation is one of social factors which is only in rural areas in this study (AWM and Steinbach) so I filtered the Winnipeg results. However, I was unable to put this factor along with other factors. Hence, I analyzed this factor first separately (table 9) and then I analysed MI and *first language* in a separate model to investigate whether MI still shows significant result (table 10). Tables below illustrate the result of mixed-effect logistic regression analyses of linguistic and social factors for *not*-negation.

Table 8. *Mixed-effects logistic regression analyses of the effect of factors for not-negation*

Not-negation					
	Est.	Std error	Z value	P	Sig.
Intercept	-0.7755	0.3421	-2.266	0.02343	*
Verb type					
Functional verb					
Have got	0.5672	0.8147	0.696	0.48632	
PP	0.1314	0.6393	0.206	0.83713	
Lexical verb	2.4945	0.2133	11.697	< 2e-16	***
Generation					
Baby boomer					
Generation x	0.7567	0.3241	2.335	0.01956	*
Millennials	0.4338	0.2945	1.473	0.14074	
Silent generation	0.5289	0.3737	1.415	0.15699	
Gender					
Female					
Male	-0.4172	0.2157	-1.934	0.05309	.
First Language					
English					
German	-0.6238	0.3159	-1.974	0.04834	*
Location					
AWM					
Steinbach	-0.9192	0.2905	-3.165	0.00155	**
Winnipeg	-0.2921	0.2624	-1.113	0.26567	
Speaker st. dev	0.2829				

Table 9. *Mixed-effects logistic regression analyses of the effect of religious affiliation for not-negation*

Not-negation					
	Est.	Std error	Z value	P	Sig.
Intercept	0.6369	0.3131	2.034	0.0419	*
MI1					
MI2	-0.4990	0.4429	-1.126	0.2600	.
MI3	-0.9027	0.3586	-2.517	0.0118	*
Speaker st. dev	0.6302				

Table 10. *Mixed-effects logistic regression analyses of the effect of religious affiliation and first language for not-negation*

Not-negation					
	Est.	Std error	Z value	P	Sig.
Intercept	0.7102	0.3032	2.342	0.0192	*
MI1					
MI2	-0.2317	0.4454	-0.520	0.6029	
MI3	-0.5764	0.3764	-1.531	0.1256	
First Language					
English					
German	-0.5901	0.2892	-2.041	0.0413	*
Speaker st. dev	0.5691				

From the data in table (8), it is apparent that verb type has the most important effect on the choice of *no*-negation and *not*-negation. As we can see in the table, not only is there a significant distinction between verb types and other factors, but this factor also has the largest range between the estimates for each level compared to any other factor. Lexical verbs strongly disfavour *no*-negation, while functional verbs strongly tend to appear with this variant. This result is consistent with Tottie's (1991 a, b) findings that more frequent verbs favour the older variant (*no*-negation) and less frequent verbs like lexical verbs tend to occur with the newer variant (*not*-negation). The outcome of lexical verbs is also consistent with previous studies that found this verb type favours appearing with *not*-negation (Childs et al., 2018; Childs, 2017, Harvey, 2013). In contrast to Childs et al. (2018) that found PP construction significant in

Toronto, this verb construction is not significant in this study which might be due to an inadequate number of tokens of PP construction (n= 14).

The second factor tested in the model is *generation*. As we can see in the table, *generation* only shows significant results among those who were born between 1965 and 1978 (Generation X). This generation tends to use *not*-negation while disfavouring *no*-negation. *Gender* as the third factor shows that male speakers tend somewhat to use *not*-negation more than female; the statistical results are just below significance at the 0.05892 level.

The results for the *first language* distinguish Low German as the first language from English with respect to the propensity in using *no*-negation. As we can see in table (8), Low German L1 speakers significantly use *no*-negation more (the older variant). Location was not initially the main factor in this study, but when I compared the result of rural areas regarding their use of *no*-negation, I decided to compare all the locations to have more accurate results. As table (8) illustrates, speakers living in Steinbach significantly favour using *no*-negation and disfavour *not*-negation.

As previously mentioned, Mennonite speakers in the corpus reside in Steinbach and AWM. Therefore, I could not put Mennonite identification along with Winnipeg tokens and I decided to see first whether this factor is significant by itself and then put it next to *first language*. Table (9) shows that Mennonite speakers, who have stronger ties to their religion, significantly tend to choose *no*-negation over *not*-negation. As we reviewed in chapter two, religious groups often have a close-knit social network, and this might encourage them to linguistically mark themselves from another group (Baker & Bowie, 2014). This result can also be defined in this way that the Mennonite community who share the same religion all favour *no*-negation to be linguistically distinctive from non-religious groups. However, when I included this factor in another statistical model with *first language*, it no longer got chosen as significant (table 10) and *first language* and *location* came out as the most significant factors among social factors.

4.5 Summary of Results

To conclude this chapter, I summarize the primary findings. First, the rate of *no*-negation and *not*-negation was very close i.e., *not*-negation was slightly more frequent than *no*-negation, and negative concord was the least frequent variant. Second, between the linguistic factors, *verb type* was the most significant factor that govern the variation of English negation in Manitoba. The results showed that while functional verbs significantly choose *no*-negation, lexical verbs favour *not*-negation. Third, among the social factors, *location* and *first language* were the most

significant factors. The results illustrated that Low German L1 speakers residing in Steinbach significantly favour *no*-negation over *not*-negation. Fourth, although the results of the age factor showed a split pattern between the older generations and younger generations, there is no obvious change in progress from *no*-negation to *not*-negation in the English dialect spoken in Manitoba. Other social factors like gender, rurality, SES, religious affiliation did not emerge as a significant predictor for any variants. Overall, the statistical analysis illustrates that the linguistic factors have a stronger effect on the variation of negation than social factors. In the following chapter the theoretical implications of the findings of this study are discussed in detail.

Chapter 5: Discussion

In chapter four, I conducted a quantitative analysis between *no*-negation, *not*-negation and negative concord to investigate the occurrence of these variants in Winnipeg, AWM and Steinbach. The detailed presentation of English negation in chapter four has shown how linguistic and social factors are correlated with English negation. In this chapter, I discuss some results emerging from the data (sections 5.1, 5.2 and 5.3), followed by the conclusions (section 5.4), and recommendations for future work (section 5.5).

5.1 Verb Type

The goal of this study was to investigate the effect of two linguistic factors i.e., *verb type* and *indefinite item* on English negation in Manitoba. The most robust linguistic factor analyzed in this study was *verb type* which consists of functional verbs (*existential be*, *have*, *copula be*), *have got*, *PP* construction and *lexical verbs*, including *do*. Existential verbs highly tend to appear with *no*-negation, which is followed by *PP*, *have* and *be*. Previous studies suggested that this result is related to the frequency of the verb types. High-frequency verbs like *existential*, *have* and *be* tend to resist linguistic change.

According to Bybee & Hopper (2001, p. 17) high-frequency verbs such as existential *be*, *have* and copula *be* are less likely to change since they are more susceptible to be reserved, retrieved, and created as a whole. Therefore, they tend to appear with the older variant (*no*-negation). On the other hand, lexical verbs including *do*, strongly prefer *not*-negation. According to Tottie (1991 b), low frequent constructions are less resistant to change and occur with the newer variant, *not*-negation. It should be mentioned that although *not*-negation is historically newer than *no*-negation, it has been in English negation system for hundreds of years. Overall, these results match those observed in earlier studies which showed that functional verbs strongly tend to appear with *no*-negation and lexical verbs robustly favour *not*-negation (Tottie, 1991a, b; Childs, 2017; Wallage, 2017; Childs et al., 2018).

5.2 First Language

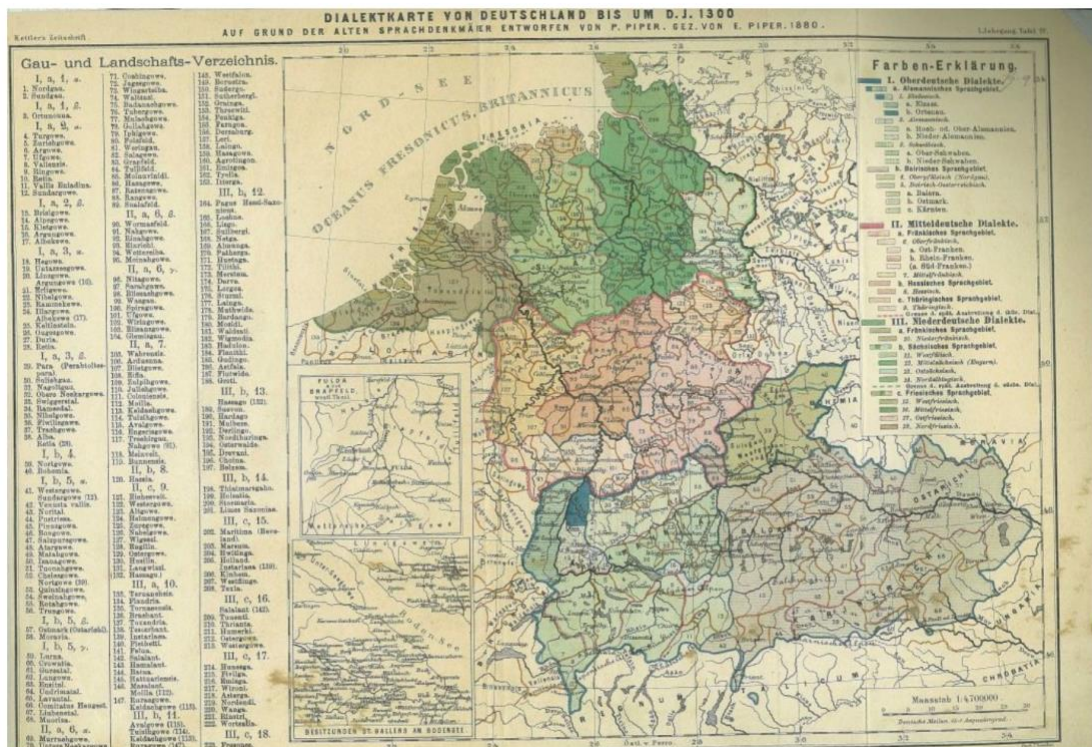
One of the most salient results of this study was that L1 Low Germans significantly favouring the *no*- form of English negation. Given this finding, it is useful to investigate whether Low German might play a role in these speakers' English negation. In the following sections I will briefly discuss Low German and Low German negation.

5.2.1 Low German

Low German was a West Germanic language which was spoken in Northwestern Germany and the Northern Netherland Mennonites during the Old Saxon period (9 – 12th c.) (Cherie Burns, 2016, p. 2). Map (3) shows Low German after the Old Saxon period. Low German is shown in green in Map (3).

Map 3. Low German ca. 1300

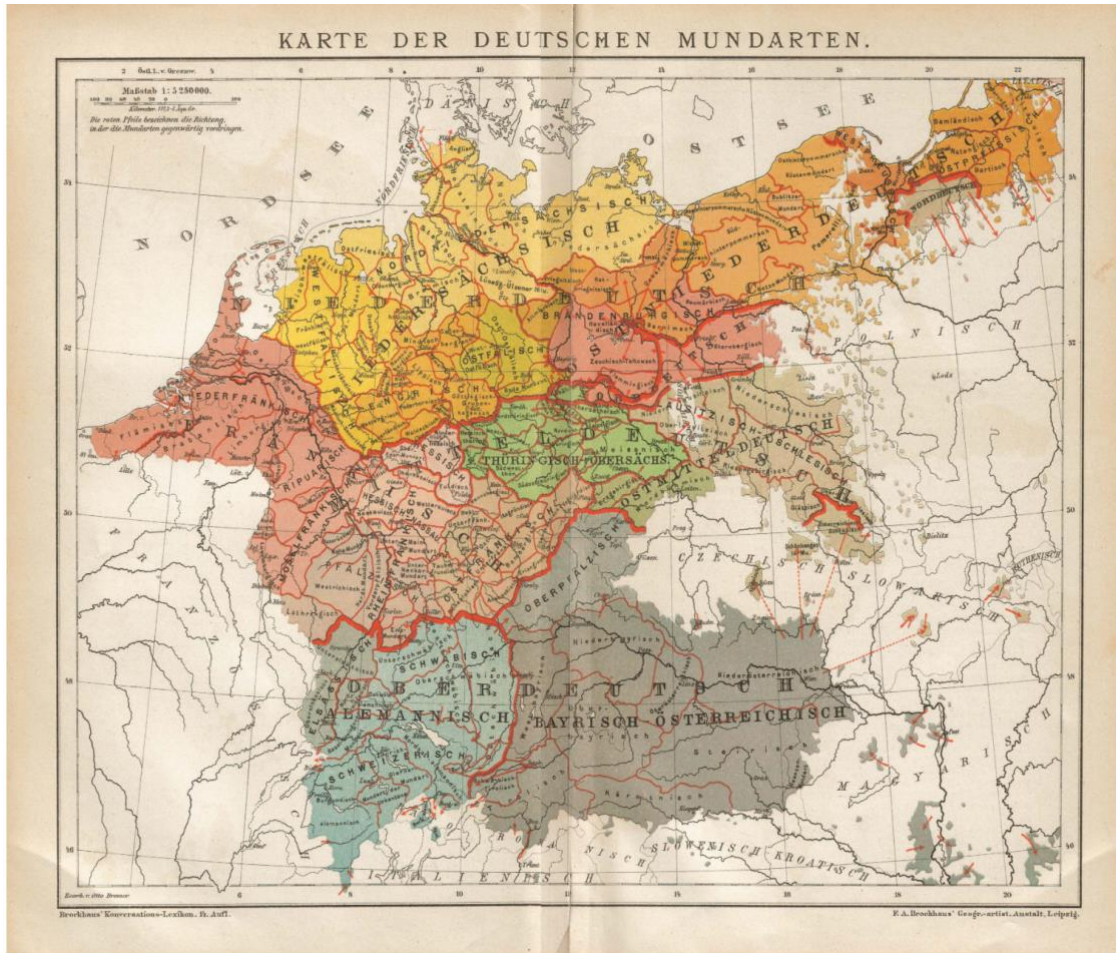
(Cherie Burns, 2016)



The period of Middle Low German began after the Old Saxon period, lasting from twelfth to sixteenth century. The twelfth century was also the start of “Eastern settlement” period in which Low German rapidly expanded into Slavic-speaking territories for various purposes like commercial, religious, and political. Map (4) illustrates the Modern Low German 200 years after the Middle Low German period ends (Cherie Burns, 2016, p. 6). Low German in map (4) is demonstrated in yellow and orange.

Map 4. *West Germanic Varieties ca. 1800*

(source: Cherie Burns, 2016)



Low German was spoken by Mennonite communities in the mid-sixteenth century when they escaped from the religious persecution in central and Northwestern Europe (Cox et al., 2013, p. 221) . As a result of this migration history, Low German today is spoken in many countries by an estimated 300,000 speakers (Cox et al., 2013, p. 221) and around 63,825 speakers in Manitoba (Statistics Canada, 2016 b). In the next section, I explain in detail the story of Low German negation.

5.2.2 History of Low German Negation

There are different studies that focus on Low German (e.g., Breitbarth, 2014; Quiring, 1928). However, I have relied heavily on the work of Breitbarth (2014) which describes in great detail the history of Low German negation. In Old Low German, sentential negation was standardly expressed by elements *ni* or *ne*, from Proto-Germanic (Breitbarth, 2014, p. 16). This element

attached to the finite verb as a prefix irrespective to the position of the verb. The following example shows how *ni* appears left adjacent to the verb *bium*.

- (55) ‘**ni** bium ic’, quað he, ‘that barn godes ...’
 NEG am I spoke he the child God.GEN
 ‘I am not the child of God, he said’ (Heliand 915)

In Middle Low German, the preverbal particle *ni-ne* alone as the negative marker became rare and this particle mostly appear with the post-verbal particle *nicht* (p. 36). From the beginning of the fourteenth century by the loss of pre-verbal particle *ne/ni*, the bipartite negative particle *en...nicht* becomes rarer in Middle Low German. Therefore, *nicht* became the only marker of negation in the early Middle Low German. This particle is not affected by the movement of the verb and it generally appears in the fixed place in the middle field (p. 37).

- (56) wil de kleger ohne deß **nicht** vorlaten
 wants the plaintiff him this NEG yield
 ‘If the plaintiff does not want to yield this to him’ (Braunschweig 02/24/1553)

- (57) Ok scole wy dit vorscrevene gud **nicht**
 also shall we this aforementioned property NEG
 tweyen ...
 halve
 ‘We shall not divide this aforementioned property in half, either’ (Scharnebeck 26/01/1410)

Breitbarth (2014) observed that while from (1325–1374) until (1525–1574), the innovative expression of negation by *nicht* increased significantly, from (33.5%) to (87.2%), the bipartite negation decreased from (66.5%) to (12.1%). Similarly, Sundquist (2007) found the same result in his Lubeck corpus. Therefore, we can say that the period during which the transition from bipartite form of negation by *ne/en...nicht* to the one by *nicht* alone happened was between 1320 and 1500.

As we saw in English, Low German also had the preverbal *ni-ne* in Old Low German which was the only negator in the sentence. By adding *nicht*, this language added negative concord to its negation system. Later, by declining the preverbal *ni-ne* in Low German, negative concord also decreased, and eventually only *nicht* remained as the negative marker. In contrast to Low German, English retained two forms of negation, *no*-negation, which

includes one negative marker and *not*-negation which includes *not* as a negative marker which scope over an indefinite DP in the form of *any* (examples 58 and 59). Low German, on the other hand, includes only a single negation form which is *nicht* (example 60). So, is it possible that the first language of these bilingual speakers, which only has one negative marker interfere, their English form of negation and it motivates them to favour *no*-negation, which also consists of one negative marker? The following examples are repeated to illustrate the difference between English and Low German negations.

(58) There was **no** money (305mrmg26mni)

(59) I don't like talking to **anybody** but her (409muee76fpi)

(60) wil de kleger ohne deß **nicht** vorlaten
 wants the plaintiff him this NEG yield
 ‘ If the plaintiff does not want to yield this to him’ (Braunschweig 02/24/1553)

Indeed, the prevalence of *no*-negation among the LGMs may be viewed as an example of the *Shortest Path Principle* governing the operation of substratal effects proposed by Wald (1996). As seen in section 2.3.6, the *Shortest Path Principle* states that the speaker chooses those variants of the second language which are closest to those of the first language. In the case of English negation, then, Low German L1 speakers choose *no*-negation because it has a single negative marker, as it most resembles Low German negation, which also uses a single marker. In other words, the reliance upon *no*-negation among the Low German speakers can correspond to the norms of the substrate language.

Figure (9) in chapter four showed that the results for first language between AWM and Steinbach are different from each other. While the Low German L1 speakers in AWM equally prefer both *no*-negation and *not*-negation, the Steinbach Low German L1 speakers highly favour *no*-negation. In the statistical analysis we saw that Steinbach significantly favours *no*-negation over *not*-negation. Therefore, the difference between these two rural locations might be related to rather than first language. For example, AWM is located closer to the US border. It is possible that this area has been more influenced by American English speakers than Steinbach. Also, these two areas have a different settlement history, with Steinbach part of East reserve versus AWM, which are part of West reserve. To investigate the reasons behind this difference, more in-depth investigation is needed.

5.3 Is *not*-negation in the process of replacing *no*-negation?

This research aimed to investigate whether *not*-negation is in the process of replacing *no*-negation. The results showed that there is not any clear-cut pattern for a change in progress among generations. What was interesting about generations was that there was a split between the older generations and younger generations. This might be the result of cultural changes that have happened between these generations. Anecdotal evidence suggests that during the 50s and 60s parents stopped talking in Low German with their children at home and English became the main way of communication between them. Therefore, we may speculate that the split between the older and younger generations can be related to this change. However, more in-depth investigation needed to have a clearer understanding of this result.

5.4 Conclusion

The aim of the present research was to examine the variation of English negation in Manitoba, namely the choice between *no*-negation, *not*-negation and negative concord. I investigated two linguistic factors, namely *verb type* and *indefinite item* and social factors like *generation*, *gender*, *rurality*, *SES*, *religious affiliation* and *first language*. This study sought to answer the following questions:

1. How are linguistic factors correlated with the choice of negation variant?
2. How are social factors correlated with the form of negation?
3. Is *not*-negation in the process of replacing *no*-negation?

The investigation of English negation showed that the frequency of *no*-negation and *not*-negation is near-equal in my sample of Manitoba with a slight preference for *not*-negation. Similarly, Childs et al. (2018) found a near equal frequency in their result in Belleville and Toronto. Unlike in Canada, Childs et al. (2018) found that *no*-negation is markedly preferred among Northern British English varieties. *No*-negation as the older variant is also strongly favoured in Childs' (2017) study in Tyneside and Glasgow. This might suggest that British dialects are more conservative than Canadian English dialects to retain the older variant (*no*-negation), while *not*-negation, historically the newer variant, has made greater progress into Canadian English dialects.

The most obvious finding to emerge from this study is that *verb type* among all other factors is the most significant factor affecting the negation variant. While lexical verbs strongly

favour *no*-negation, functional verbs significantly disfavour this variant. This study is in line with Tottie's (1991b) hypothesis that high frequency verbs like functional verbs tend to appear with *no*-negation and low frequency verbs like lexical verbs favour *not*-negation. Among the social variables only *generation*, *location* and *first language* showed some significant result. Although generation showed some interesting results, no obvious change in progress is happening. While rurality did not emerge as a significant factor, interestingly, the two rural locations showed a significant difference from each other: speakers in Steinbach significantly prefer the use of *no*-negation in their speech while speakers in AWM prefer *not*-negation. Regarding first language, this study shows that bilingual speakers who have Low German as their L1 tend to use *no*-negation significantly more than English L1 speakers. Therefore, this study suggests that these speakers might transfer their L1 form of negation into their L2 form.

5.5 Recommendations for Further Research

Due to the number of participants in Steinbach in this study, the conclusions that were drawn can be only suggestive. More participants are needed to determine the impact of Low German and location on the choice of negation construction. It is recommended that further studies be conducted with a larger number of participants to increase the reliability of the results.

As we saw in Figure (9), the rate of *no*-negation and *not*-negation between Low German L1 speakers in AWM and Steinbach was different. While Low German L1 speakers in AWM use *no*-negation and *not*-negation equally, *no*-negation is much more frequent among Low Germans residing in Steinbach. The different results between these two locations could be due to their settlements in different reserves. It might be interesting to investigate other potential sociolinguistic differences between the regions, to determine whether the difference in negation distribution is part of a more meaningful dialect difference between the two regions.

It is suggested that further studies in the Prairies consider another significant linguistic factor i.e., *complexity of the verb*. Previous studies (e.g., Childs, 2017) illustrate that this factor may significantly affect the appearance of negation in various British dialects. Unfortunately, I was unable to include this factor given the already large number of factors under investigation.

Ontario also is home to a large population of Low German speakers. It could be interesting to investigate how the Low German speakers residing in Ontario treat negation as compared to Low German speakers in Manitoba.

This study showed us that in addition to the linguistic factors, in particular *verb type*, that have a robust effect on the variation of English negation, *first language* and *location* can

significantly affect the occurrence of negation. The result of this study illustrates that based on the *Shortest Path Principle* (Wald, 1996), Low German L1 speakers choose the negation structure of their L2 (English) which correspond most closely to the negation structure of their L1 (Low German). In other words, the higher frequency in using *no*-negation by Low German L1 speakers means that they have a similar form in their L1 which is transferred into their L2.

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