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Religious Networks as a Sociolinguistic Factor: The Case of Cardston

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Religious Networks as a Sociolinguistic Factor: The Case of Cardston

by

Benjamin Chatterton

A thesis submitted to the faculty of

Brigham Young University

in partial fulfillment of the requirements for the degree of

Master of Arts

Department of Linguistics

Brigham Young University

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BRIGHAM YOUNG UNIVERSITY

GRADUATE COMMITTEE APPROVAL

of a thesis submitted by

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This thesis has been read by each member of the following graduate committee and by majority vote has been found to be satisfactory.

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ABSTRACT

Religious Networks as a Sociolinguistic Factor: The Case of Cardston

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Master of Arts

Religious affiliation and its inherent membership in an associated social network as a sociolinguistic factor is examined in the community of Latter-day Saints (LDS) in Cardston, Alberta. Building on Meechan's 1998 findings that the LDS community in the area used Canadian Raising in a different set of phonotactic environments than the surrounding non-LDS English speakers, the study aims to determine if the LDS community uses other Canadian speech features differently or less frequently and if any Utah features (defined as Utah English in the literature, being the language of LDS English speakers in Utah) have continued from the settling of the area by Utahns in the 1880s. The study analyzes the effect of religious affiliation on dialect leveling and general sociolinguistic change. To perform the study, interviews were conducted with 51 informants eliciting items characterized by Canadian and Utahn features.

Statistical and inferential analysis shows that one Utah feature, the *cord-card* merger, survived in a very attenuated form in the speech of older respondents, and Canadian features were generally less prevalent among the LDS. It is concluded that religious affiliation is a factor in the phonology of the region.

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CHAPTER 1: RELIGION AS A SOCIOLINGUISTIC FACTOR IN SOUTHERN ALBERTA

1.1. RELIGIOUS NETWORKS AND SOCIOLINGUISTICS. Sociolinguistics, as a subfield of linguistics, has always had the challenge of identifying the effects of different social attributes on the language of speech communities. While socioeconomic standing, gender, age, education, ethnicity, et cetera all have some sort of effect on language, it appears that all of these factors may feed into or alter the structure of social networks. Milroy (1980: 202-205) shows these networks to be a heavily influential factor in dialect change.

Religious affiliation, in general, seems a difficult sociolinguistic factor to analyze: its measurements are often qualitative rather than quantitative, and its effects only obvious in social groups in which there is a certain amount of religion-based isolation. In other groups, religion is difficult to separate from other factors such as socioeconomic class or ethnicity. Despite isolation and ethnic distinctions from the destination culture, religion has been at least a motivator for migration (especially emigration to the US). It is definitive factor in social group formation and function (as in Amish country, see Huffines 1980), and therefore its effects on language use in these areas should be substantial.

The effect of religious affiliation is the primary topic in Meechan's (1993) study focusing on the effect of affiliation to the Church of Jesus Christ of Latter-day Saints (Latter-day Saints, LDS) with regard to Canadian raising in Southern Alberta, Canada. She found that raising (in which [ay] as in *house* is produced as [ʌy] and [aw] as in *about*

is produced as [ʌw], primarily before voiceless obstruents) was triggered by different phonetic environments for LDS versus non-LDS respondents.

It should be noted that religious affiliation is not a replacement for the social network—it is a major factor in the construction of these social networks, and in the case described, religious affiliation is the most important factor in maintaining the LDS social network. In essence, the purpose of the study is not to divide social networking from the factors that influence it, but to study religion's influence on language change and maintenance, recognizing that its influence is expressed through the mechanism of social networks.

Such findings prompt the question: do other features of local speech in Southern Alberta vary along religious lines? The main goal of this study to determine whether LDS respondents use other Canadian English features less frequently than their non-LDS counterparts. Further, being that the religious group studied immigrated to Alberta from Utah, a second goal of this study is to examine whether LDS residents in the area also employ phonetic features of Utah English. It may also be that features associated with Utah have been adopted by non-LDS speakers in a predominantly LDS Cardston area, and so non-LDS use of Utah features will also be subject to examination.

In order to understand how these different varieties of English are related, a brief migratory history of Utah and Canada, and the unique features of the two varieties follow. After the discussion of features follows a short description of the LDS community in Southern Alberta, Canada.

1.2. SOUTHERN ALBERTA AND UTAH. Starting in 1847, LDS church members from many different parts of the United States (congregations of the Church had been headquartered in New York, Pennsylvania, Ohio, Missouri, and western Illinois) immigrated into the Salt Lake Valley. It is interesting to note that one of the most prominent Utah English markers, the *cord-card* merger, exists in St. Louis (though LDS settlers were primarily on the other side of Missouri), but reversed. Further immigration into Utah continued to occur from various parts of the world—the Pacific islands, the UK, Scandinavia, and Latin America all contributed significantly. (Hunter, 1939) This immigration has affected the dialect of Utah in general—features from these dialects have all affected Utah English.

UTAH ENGLISH

English as spoken in Utah is, like all varieties, made distinct by a combination of features that it shares with other dialects. Specifically, there exist two features that overlap in Utah (and likely southern Idaho and northern Arizona—collectively this area is called the “Area of Mormon Dominance” by Di Paolo (1993) or the “Jell-O Belt” by Bowie (lecture, 2003), in reference to Mormon in-jokes about the dessert—are the *cord-card* merger (in which the vowel in *cord* and similar words is pronounced as the vowel in *card*) and pre-lateral vowel laxing (in which *milk* is pronounced with an [ɛ], *fail* is pronounced as *fell*, and *feel* is pronounced as *fill*, among others). The *cord-card* merger occurs primarily within the older demographic, as per Argyle et al. (2004) and has occurred at least since the 1930s as per Bowie (2003). Pre-lateral laxing appears to be

more novel, and has been noted in other parts of the Mountain West area (di Paolo and Faber 1991).

The phrase “Utah English” has been widely used in the literature as shorthand for English as used by the majority of English speakers in Utah as well as those that pattern in similar ways nearby. Bowie (2003) both clarifies this point and finds his data from LDS respondents, and Argyle et al.’s (2004) study delineated that the features considered part of “Utah English” are more common among LDS English speakers in the area. Given this evidence, the term “Utah English” will continue to refer to the variety described in these other studies—the language used by the majority of Utah’s English speaking population, that majority being LDS.

CANADIAN HISTORY

Canada, settled by Europeans primarily of British and French extraction, was part of the British Empire from 1763 to 1867. The area is not as densely populated as the United States, but has had a steady influx of immigrants, which has in modern times become the highest per capita immigration rate in the world. Much like the U.S., Canada’s population grew westward, with many settlers moving all the way to the coast (British Columbia), and more gradual growth in Manitoba, Saskatchewan, and Alberta (<http://en.wikipedia.org/wiki/Canada>, [http://en.wikipedia.org/wiki/Canadian Prairies](http://en.wikipedia.org/wiki/Canadian_Prairies)). This growth pattern yields similar Western homogeneity of English, but unlike the U.S., most of the rest of Canada speaks similarly. (Labov, 1991)

CANADIAN ENGLISH

It has been noted that Canadian English is remarkably homogeneous from Toronto westward (Labov, 1991). The most salient feature of English in Canada is that of Canadian raising. There are plenty of other features that distinguish General Canadian English when taken together: the production of *stone* and similar words with [ɔ], *bag* with [ey], the production of /a/ in borrowed words as [æ], and some stress-related features (primary stress being placed on the /æ/ in *adult*, for example). Like the Utah features, these Canadian patterns occur in other locations as well. They are present in various degrees in locations that are geographically close to each other: the Great Lakes area, as well as northern Minnesota, Wisconsin, and North Dakota (Labov et al., 2005: 206, 216).

LDS CULTURE IN ALBERTA

Southern Alberta was colonized by Latter-day Saints under the direction of Charles Ora Card, who was under pressure from U.S. law enforcement for violating polygamy laws. He and his group settled Cardston, less than 75 km south-southwest of Lethbridge. Cardston was founded in 1887. (Hudson, 1961) As Cardston is not particularly far from Utah, there has certainly been constant contact between the area and Salt Lake City. The Cardston Temple having been built in 1912 (lds.org), this contact would not have been out of any particular religious duty (LDS members who meet qualifications are expected to attend the nearest temple as regularly as resources permit), but continued contact would exist through General Conference (which is broadcast from Salt Lake and watched and listened to by most faithful LDS). Other contact would

involve students attending Brigham Young University, BYU-Idaho, or LDS Business College, or missionaries entering the (now defunct) Language Training Mission, or the current Provo Missionary Training Center, all located in Utah or Idaho.

THE AREA OF MORMON DOMINANCE

As Mormons immigrated into Utah from across the Great Basin (and from across the Atlantic Ocean), church leaders sent settlers to colonize other parts of Utah, as well as various other areas in the Mountain West region, and on to Southern California (Hunter, 1939). Members of the LDS Church constitute a majority in many towns in Utah, Idaho, and northern Arizona, and are a significant presence in parts of western Colorado, throughout Arizona, and into western Wyoming, Montana, and even in southeastern Oregon. Cardston, located just north of this area, may either be considered an end of this continuum or an isolated Mormon community.

SOUTHERN ALBERTA'S PLACE IN TWO DIALECT CONTINUUMS

The purpose of this study is to identify the phonological differences between the LDS and non-LDS speakers in the area—it is proposed that the LDS speakers will pattern with the rest of the Area of Mormon Dominance, while the non-LDS speakers will pattern with the rest of General Canadian. Further, the study proposes to determine the existence and extent of the influence of General Canadian on the LDS speakers in Southern Alberta, and the influence of Utah speech on the non-LDS population in the area. In other words, LDS speakers in Southern Alberta should have traits of both Utah

and General Canadian. The Utah traits could be manifest in either the existence of these features or in the absence or distinct usage of Canadian features.

1.3. A STUDY OF RELIGIOUS INFLUENCE IN SOUTHERN ALBERTA SPEECH. Sociolinguistic inquiry has sought to find sociological explanations for language change. Primarily, explanations for change have been given with social class and ethnicity as driving factors. Change has been shown to come from social pressures to conform as well as pressures to maintain a distinctive identity. Labov's (1964) dissertation was a breakthrough study in which pronunciation was linked to apparent social class (that is, that workers in department stores of varying social classes accommodated their speech to that of the perceived class of their workplaces). The study showed that *r*-lessness, which is stigmatized in this variety, was more common in lower-class establishments. Other studies, as discussed in the next chapter, have examined region of origin, ethnicity, gender, age, and religious affiliation as sociolinguistic factors.

Religious affiliation has been shown to be a significant sociolinguistic factor in LDS communities in southern Alberta. Meechan (1998) showed that Canadian raising was less common in the speech of Mormons in the area than in the speech of people of other faiths. Her study focuses on this variable (/ay/ and /aw/ raising) as a distinguishing factor between LDS and non-LDS people. The fact that the LDS respondents were different raises a series of questions regarding the relationship between the Mormon speech she studied and the speech of other LDS people:

1. Do LDS and non-LDS English speakers in the area differ in their use of Canadian English features?

2. Does the speech of LDS Southern Albertans share similar phonological features with speakers of Utah English? If so, which ones and how did they survive?

3. Is religion really the underlying factor in determining the phonological features used by Southern Albertans, and if so, how does religion interact with other sociological factors such as age and gender?

As a background to the relevance of and answers to these questions, I will provide a brief history of sociolinguistics, and how that field has progressed in identifying social phenomena that catalyze language change and affect its course. The general discussion will begin with an overview of sociolinguistic inquiry, then move on to the important factors affecting the possible results of this study (general sociolinguistic factors, including age, gender, and religion) and the mechanisms of change. These mechanisms include social networks' influence, second dialect (D2) acquisition, and standardization in first-language (L1) acquisition. I will also discuss some generally relevant dialectological topics in North American English, specifically those areas studied (Canada and Utah) and their existence within the region of one dialect of North American English. Continuing on, the effect of religious affiliation specifically on language change will be examined, ending in a discussion of Meechan's original work and how her findings relate to this study's specific goals.

I hypothesize that some of the Utah features will have continued into Southern Alberta LDS speech, and that the LDS English speakers will use Canadian features differently from non-LDS respondents. I further hypothesize that religion will be found to be a significant factor in both of these phenomena.

CHAPTER 2: REVIEW OF PREVIOUS RESEARCH

2.1. SOCIOLINGUISTIC FEATURES. The purpose of this study, as mentioned, is threefold: (1) to find whether LDS and non-LDS English speakers in Southern Alberta use Canadian patterns differently, (2) to find whether LDS speakers in Southern Alberta use Utah patterns, and (3) to determine if religion is really the underlying factor in determining the differences in speech patterns among Southern Albertans. Other factors are studied in the following sections, followed by a discussion of the mechanisms which might propagate different speech changes in the area. Finally, there is a discussion of the speech features (Canadian and Utahn) in question.

2.1.1. ORIGIN. Region of origin (by definition, the location in which a participant was raised, which may be as large as a nation or supranational entity, or as small as part of a city) is an often-discussed factor in sociolinguistic studies. Guy (1980:1-36) finds origin to factor into language change, as he notes that for English speakers who participate in final /tld/- deletion (i.e. deletion of the /t/ sound in words like *past*), the phonetic environments for that phonological change (rather, the order of the environments that most prefer the change) are different for people from Philadelphia than they are for those from New York City, much as Meechan herself noted that Canadian raising was performed in different phonetic environments among Mormons and non-Mormons.

Majors (2005) shows how regions of origin (and those regions' population densities) may be related to language change by discussing the spread of the cot-caught merger (/ɔ/ and /ɑ/ merging to /ɑ/), characteristic of the dialect that spreads from the

Midland (Pittsburgh uses a variety exemplary of this dialect) west and includes most of Canada as well as Utah. Majors shows that this merger is spreading across Missouri with the exception of St. Louis, which patterns similarly to varieties of the U.S. North—raising the question how one regionalism is selected over another in such contact areas and whether similar population density effects will factor into the use of Canadian and/or Utah features among the residents of Southern Alberta. Specifically, is there an urban size requirement or some other population-dense mechanism responsible for this maintenance—could a population-sparse area such as Southern Alberta maintain dialect in the same way?

2.1.2. ETHNICITY. Ethnicity is another essential sociolinguistic variable—it is often the default variable in sociolinguistic inquiry. Defining ethnicity is a difficult task (e.g. Is “American” an ethnic label?), but people who speak the same language natively and are of the same genetic stock and homeland are certainly ethnically similar. The genetic issue is brought up by Wolfram (1974) in his study in which the differences between the speech of African Americans and the speech of southern white Americans are brought to light—it appears from his work that the two groups, though with a lot of common history, speak differently from each other, a condition in which ethnicity can be singled out (if not disentangled from other factors) as the primary distinguishing factor.

It is also true the ethnicity is often intertwined with other sociolinguistic factors. For example, Anderson (2002) shows ethnicity influencing language change by analyzing the realization of /ay/ as monophthongal /a/ in speakers of African American Vernacular English (AAVE) in Detroit. Despite the fact that traditionally, Detroit AAVE speakers have not monophthongized /ay/, they are beginning to do so now—and the cause seems

to be dialect contact with Southern whites. Generally speaking, Detroit has become more and more polarized along the axis of ethnicity in recent times, with Northern whites departing Detroit proper, and settling in the suburbs, leaving the city itself more and more predominantly African American. However, there has been an influx of Southern whites to the inner city, and the research in Anderson shows that leveling by contact between these African Americans and Southern whites is the reason for this language change. She reiterates two intriguing factors: the fact that there seems to be positive feeling between these two groups, and the fact that given the evidence, Detroit AAVE speakers are beginning to monophthongize /ay/ in environments in which other AAVE speakers do not, but in which these migrant Southern whites do. Independent of which social factor is examined, be it ethnicity, social class, age, or any other, it is contact which is the driving force behind language change. It could be concluded that ethnicity by itself has any direct effect on language but by changing how linguistic contact is made.

It seems like a simplification to assume that sympathy and contact are the ready-made recipe for dialect leveling, but there are not many alternatives in the Detroit case. Ethnic descent can also be a factor, and ethnicity (like the other factors) can affect more than just the phonology and the lexicon—grammar may also be affected. DiPaolo (1993) proposes ethnicity as the reason for proredicate-do maintenance in the “Area of Mormon Dominance”—English descent in the LDS membership is asserted to be the cause of the continuation of the phenomenon.

How is the LDS community an ethnicity? The community, though its connections are primarily religious in nature, DiPaolo refers to it as an “ethnicity”, a claim that seems to tie the ethnic, social, and faith-based factors together. Membership in

the Mormon community in the Rocky Mountain area (DiPaolo calls it “the Area of Mormon Dominance”, hereinafter AMD) could, in an interesting way, be considered an ethnicity. Widely, they are of English or Scandinavian (or a mix of the two) descent, and arrived in the area at roughly the same time. There are some obvious internal linguistic traits that mark a speaker as LDS (usually ecclesiastical jargon). In other ways, however, the LDS church is much less like an ethnicity. Members join and some even move into the AMD from cultures far distant from that of the AMD itself, and there is a specificity of social structure in the LDS church that does not mirror the generality of an ethnicity. Mormonism in the AMD could be thought of in relation to Catholicism in Italy: though Italian may be an ethnicity, Catholicism is not, even though it is the central religious affiliation among those of that ethnicity. In many other ways, the LDS community is not ethnically different from the rest of the Mountain West.

Ethnicity as a factor can be overridden by other sociolinguistic factors. Boberg (2004) finds that the ethnic backgrounds of Irish and Jewish Montrealers (who are English L1 speakers) are hardly expressed in their speech now—and that of Italian-Canadians only slightly. Canadian raising, in fact, is now common in very many of these respondents.

2.1.3. SOCIAL CLASS. Though sociolinguistics often focuses on ethnic groups within a speech community, it is clear that there are some non-ethnic factors that can change language use, socioeconomic class being the most salient. William Labov’s quintessential study of New York /r/-lessness (1964) sets the pace for sociolinguistic study based on something other than ethnicity. A characteristic of New York City English, /r/-lessness

(dropping /r/ or replacing a vowel that was previously followed by /r/ with a rhotacized one) was replaced with a fully pronounced approximant /r/ in higher class department stores. In fact, when stratified into three different class levels, three different frequencies of /r/-use were found. Since that time, several studies have verified that social class is very often a factor that determines feature use (see Fought 1999, Preston 1991, and Labov 1972). Social class is related to dialect prestige as well, and it may be that Utah English is a prestigious dialect for LDS English speakers in the area. This factor will be examined in this study due to its general importance.

2.1.4. GENDER. Gender is a complicated factor; speaker gender affects speech patterns, especially in lexical choice (Frank 1990). Perceptions toward gender change speakers' patterns, and conversely, speech patterns are perceived by speakers in terms of gender (Frazer 1994). In the current study, speaker gender is examined; speakers' attitudes about gender are not. In general, studies examining gender and language change have found that women have been found to lead out in language change, especially toward a standard. Trudgill (1972) performs a very complex study of standard and non-standard forms in Norwich, in which he finds that, for the most part, women conform to the standard more than men. In discussing pronunciations of /o/, the findings are reversed for lower class women. In general, Trudgill finds women standardizing more than men, with an exception for younger women (under 30), who continue to propagate non-standard forms. Women also make different lexical and pragmatic choices than men. Lakoff (1973) notes disparity in lexical choice. Expletives are more likely to be actual profanity and other taboos when spoken by men, very specific color words and certain adjectives

are particularly feminine. Women answer questions with question-intoned statements much more than men. The relationship between gender is such that men in Cardston are more likely to maintain Utah-like features, if they exist, being that General Canadian is the standard dialect of the area, and women tend to conform to the standard more quickly.

2.1.5. AGE. Like gender, age as a factor in language change has been well-studied, and seems to be directly related to the expression of dialectal features: older people tend to exemplify specific regional forms as younger people conform to the standard. Stolten and Engstrand (2002) found, for example that in Arjeplog Swedish, a Lapplandic variety marked by preaspirated consonants, age affected preaspiration positively (older speakers aspirated more than younger). Surprisingly, the women expressed more aspiration than the men in the study. In a follow-up study (Stolten and Engstrand 2003) they further found that a speaker is perceived as older if speech samples are lengthened and their F0 is increased. Note that in the above discussion of Trudgill 1972, females under 30 tended to propagate the regional, non-standard form—indicating that age and gender link in some sociolinguistic phenomena. Schilling-Estes (1997) finds that /ay/ and /aw/ raising in Ocracoke (“hoi toiders” raising) is more common in older generations, indicating a decline. Raising in Smith Island, Maryland is on the increase, as shown by the feature being less common in older speakers, more common in younger ones. These two phenomena show that the features themselves are not essential, but the age of the speakers. The fact that younger speakers adopt the raising implies that raising is being adopted by the speech community in one case, while the youth’s lack of raising implies its departure in the other. In general, age effects on language other than the attendant

physiological pitch changes are such that a review of age groups in speech often simply tells the history of the pattern in question. In the same way, maintenance is more likely to be a trait of older speakers than younger ones in Southern Alberta, giving the researcher age as a guide to determine the direction of change in the area.

2.1.6. RELIGIOUS AFFILIATION. Religious affiliation, though less studied a factor than ethnic or socioeconomic factors, has a body of work devoted to its place in sociolinguistic inquiry. Related to this work is the idea that affiliation with a faith is a factor which can influence dialect maintenance. Holes (1995) notes the differences between Sunni and Shi'a Arabic speakers in Bahrain, Jordan and Iraq. His study of speech in Manama shows maintenance of the Shi'a speech patterns despite the fact that Sunnis provide most of the government and prestige Arabic forms in the area. These groups are historically different, however, and religious affiliation cannot necessarily be pinpointed as the most important factor in their distinction. Iraq, in a different case, has two prominent dialects in which the historical division of their associated speech communities dates back to between 1258 and 1401, long enough ago that these groups cannot be distinct purely by an incomplete leveling phenomenon—and the dialects are divided in Baghdad by religious affiliation. Christians use one pattern, Muslims another. Huffines (1980) mentions that English speech patterns are different among Amish groups with varying levels of isolation from U.S. society, but this is primarily because of interference from German.

Di Paolo (1993), as mentioned previously, shows proredicate *do* as an indicator of association with what she calls “Mormon ethnicity”, having found that among

Fundamentalist Latter-day Saints (FLDS) and members of the Church of Jesus Christ of Latter-day Saints (“Latter-day Saints”, LDS) pro-do was common across the board, and more common for FLDS than for LDS. Proredicate *do* can be exemplified by two sentences, one a question, one a response: “Could you have gone to the store?” “I could have done.” Di Paolo traces the feature to an English origin, which was influential in this “ethnicity”. It would be interesting to study pro-do in other U.S. areas of predominately English ancestry. If a non-pro-do dialect was found, it would lend credence to the idea that religion contributed to the maintenance of this dialect feature (especially considering the increasingly non-LDS population of Salt Lake City). Likewise, the Utah ancestry of the LDS English speakers in Southern Alberta is clearly the origin of Utah features if they are found in research. It is religion that shapes contact in the area and maintains the features in an environment that otherwise does not use them.

Religion is an interesting factor to separate from ethnicity. Some religious groups, like the Amish, are close to an ethnicity, having primarily descended from a different ethnicity and living in close quarters with reduced outside contact. Most religions, however, are geographically scattered, but have common contexts on which to draw, and meet frequently. In our case, this part of Southern Alberta is predominantly LDS, and so the social networks in the area overlap with the area of influence that religion likely has.

2.1.7. OTHER FACTORS OF SPEECH COMMUNITY IDENTITY. Milroy (2002) notes that the state of sociolinguistics has historically ignored concepts of mobility and contact in favor of an idealized speech community without inlets, outlets, or the normal cross-cutting seen in actual socialization. She suggests that understanding contact is essential in the

development of the field, and points to the articles discussed in this section by Chambers (2002), Kerswill and Williams, and Anderson as examples of contact-based studies.

Beyond the concept of ethnicity and geography as the primary determiners of speech community, intra-ethnic ideas can be good examples of language varying with social group membership.

2.2 MECHANISMS OF CHANGE. For all the discussion of social factors and how they influence contact which thus changes language, there should also be discussion of the models that describe the nature of that contact. There are various explanations of general sociolinguistic contact (which will be discussed below), but the most compelling is the “gravity model”, which states that the size of a social community is directly related to the influence it has on other communities. The closer such a community is, the more it will affect those others. This model mimics the roles mass and distance play in Newtonian gravitation (Newton, 1687). Trudgill (1974) proposed that the “gravity model” used in social geography could be implemented to explain the influence one speech community had on another. He took as examples changes in the post-vocalic, pre-consonantal /r/ in England, uvular /r/ in the greater European Backbone, and the vowel systems of southern Norway. Complicated changes to his original equation yield an accurate-looking map of these and other changes, especially for /h/-deletion in England. In an interesting take on the U.S.-Canadian issue, Boberg (2000) notes that despite thoughts to the contrary from the expectations of Trudgill’s “Gravity Model” of sociolinguistic influence, the Canadian border is, in fact, an isogloss border (an isogloss being a geographical region that uses one common linguistic feature), especially noting the vowel systems of Detroit and its Canadian suburb, Windsor, Ontario. However, he goes on to mention that the West of

Canada tends to pattern with the rest of the West of the United States, which seems to agree with Labov's (1991) "Third Dialect"—this is a dialect that covers a very large part of the Western and Midwestern U.S. and most of Canada. This has some implications for the study of language in the area. If there are areas in which the gravity effect does not hold the kind of sway that is expected, tiny Cardston could maintain its language despite the influence of comparatively giant Calgary and the closer Lethbridge.

2.2.1. LEVELING. Dialect leveling, or convergence within a single dialect, refers to the reduction of one set of patterns in favor of another set used by a larger speech community in the same region. (Note that it can occur bilaterally.) It is the phenomenon most likely to accurately describe changes that would cause Cardstonians to sound like the rest of Canada. A variety of maintenance specific to intra-dialectal contact would describe the patterns' distinction, if research finds that the patterns are distinct. Leveling is shown to take place in speech communities by Zentella (1990) in which multiple Spanish speaking communities begin to accommodate one to another, being affected in their leveling by Anglicisms from the community (New York City) in which all of these communities have converged. This type of convergence, and its opposite, concentration (in which an increasingly small group of speakers become increasingly unlike the larger dialect) were also identified by Wolfram and Schilling-Estes (1999).

Leveling is often an indicator of social adaptation. Johnson-Weiner (1998) notes the importance of Pennsylvania German (PG) in Anabaptist groups (especially Amish and Mennonites) and that the more conservative the group in question is, the more likely they are to speak PG, or even more likely, High Pennsylvania German, an older variety.

The more liberal groups, seeking converts, have transitioned to English as their primary code, and have even been known to scold children for excessive use of PG. These liberal groups are the more likely to use electrical equipment and automobiles, and their contact with the outside world was an explicit determination.

Contact expedites leveling. Bowie (2001) finds leveling in Waldorf, Maryland, by people who have long associated themselves with their southern neighbors, even folk-linguistically (apparently, whether monophthongization is the norm is actually discussed in the town, though certainly not in those terms). As time progresses, native Waldorfians are monophthongizing /ai/ much less than previously. Bowie uses Washington commuting as a possible explanation for the behavior, which would also be a legitimate concern if leveling is found among Cardstonians, as the town falls into a similar pattern. Previously isolated from the majority of Alberta, now Cardston Mormons are more likely to need to work, go to school, play, and run errands in Lethbridge, Calgary, Edmonton, and the rest of the area, while their dealings with Salt Lake City and Provo are more and more limited.

Work has been done regarding the similarities in distinct dialects where contact between the dialects cannot be used to explain similar vectors of change in both. Schilling-Estes (2002), for example, finds the Lumbee of Robeson County, North Carolina, and the Anglo-American settlers of Smith Island, Maryland to both have been resisting a complete dialect leveling phenomenon, “leveling” here referring to the reduction of local patterns to match the larger dialect surrounding them. (Note that “leveling” can also occur bilaterally.) The Smith Islanders, though they have had increased contact with the outside world, and have leveled to a certain extent, they have,

in the case of Smith Islanders, increased use of certain phonological markers (notably raised /ay/) while decreasing grammatical idiosyncrasies, while the Lumbee have continued to use overgeneralized non-standard grammatical devices while leveling in the phonological (which also includes a raised /ay/, this time being replaced by a monophthong).

2.2.2. SOCIAL NETWORKS. Social networks are another phenomenon that has been proposed as a mechanism of language change. A social network, in its simplest form, is a group of friends or acquaintances or colleagues. Each network is connected to another network, and it may be that these networks are the breeding grounds of language change, with new features propagating quickly through the tight-knit groups. L. Milroy (1980:50, 72-73) discusses the generalities of social networks and their relation to speech in *Language and Social Networks*. She notes that vernacular culture is related to vernacular speech, and that network membership is related to the communication of both. Dense networks tend to be homogenous in their speech patterns and also tend to be lower-class groups, who are responsible for transmitting the vernacular.

Though a description of this study would also have been appropriate in the socioeconomic section, the following is an example of social networks (in the form of high-school cliques) influencing both change and maintenance. In a series of Detroit suburbs, Eckert (1989: 67-69) studies “jocks” and “burnouts” (achievers from higher-class families and less-driven members of a lower-class society) and finds that jocks tend toward standardization while burnouts maintain the regional vowels. Paolillo (2001) examines real-time social interactions among speakers of Hindi on Internet Relay Chat (IRC). Examining the groups using this medium, a dominant group, and at least two

other well-defined social groups (networks) were discovered to match their communicative patterns. The abbreviated language of the internet could be considered the second dialect (D2) of these users: capable of using Hindi codeswitching and English, some on the fringe adopt the dialect of IRC at large (it is likely that these users participate on multiple channels), some do not. Taken with Eckert's Detroit study, it appears that, if this could be generalized, there would be three possibilities for social adaptation in dialect leveling: adopting all the patterns of the larger social structure (in this case, IRC, in this thesis, Canada), preserving the patterns of the origin group, or adopting the most prevalent patterns of the target structure (Canadian raising, for example) while maintaining many other patterns of the origin group (Utah English, in this thesis).

Milroy, from the 1980 work previously mentioned, includes in her conclusion the idea that *language maintenance* is performed by close-knit social networks: patterns are defended from outside change by group members on the inside. Flores and Toro (2000) theorize along this axis, supposing that pronominal expression in U.S. Spanish (Spanish being a notably pro-drop language—one in which subject pronouns can be omitted) is not determined by exposure to English: the more established in New York City their respondents were did not factor into pronominal expression. The hypothesis of their study was that respondents' original dialectal tendencies would correlate with pronominal expression even after being "established". It appears that even this theory did not completely hold up—one respondent began to pattern with the other Caribbean Spanish speakers, even though said speaker is from Western Colombia, and farther away from the Caribbean region as such. Social contact (and by extension, networking), is one explanation for the discrepancy.

2.2.3. ETHAN'S EXPERIENCE. Another possible mechanism for language change is that it primarily happens with the acquisition of a first language (L1) by succeeding generations of speakers. Chambers (2002) discusses the "Ethan Experience", in which children filter out the non-standard dialects of their parents, without realizing even single items with the accent of either parent. Chambers points out that this likely occurs beneath the conscious level, and that it is possible that the Ethan Experience may even extend to bilingual speakers where English is the L2. This may not be as important between two native dialects, as Ethan's parents were both foreign. However, this kind of discussion is exceptionally relevant here: as Lethbridge Canadians began to associate with Cardston Mormons, language likely changed toward the Canada standard. The questions this raises: Are there any features in English that are completely below the conscious level—not just "Ethanized" away from little children, but so masked from public recognition that they could only be passed from parent/guardian to child, bypassing the Ethan Experience entirely? Also, in a world of ever widening local influences, how does speech in Lethbridge, or even Calgary factor in?

This change may come through factors in L1 acquisition. Foulkes and Docherty (2006) note the sociophonetic ramifications of child-directed speech (CDS or "motherese") in determining gender-based phonological production in Newcastle, England. There, a laryngealized, weak /t/ sound is used word medially primarily by men, and a pre-aspirated /t/ is used word-finally primarily by women. This study, though concerned with gender issues, treats the sociological aspect (gender) rather than the biological aspect (sex, a study of which would likely involve F0 as its primary variable) and is therefore relevant to the questions of this paper—can directed language acquisition

account for the passing of distinguishing features of language beyond whatever mechanism maintains a standard?

The Foulkes-Docherty study involved analyses of both the speech of the child and the speech of the parent and found that not only did the parent frequently use the gender-appropriate feature when speaking to the child, but the child managed to speak in a gender-appropriate manner, ostensibly taking cues from the parents' forms. That being said, this gender division did not occur automatically in any way. As an illustration, for pre-aspirated word-final /t/, the males used this traditionally feminine marker more than the females until age 3, when there was a sharp downturn in male use of the feature. In their review of relevant literature, they do mention a number of features that are primarily linked to socioeconomic class (notably Labov's classic New York /r/), implying that some sociophonetic mechanism is at work—this would explain how variations continue to exist in a heterogeneous society, a sociological factor that rewrites the standard set by the processes described by Ethan's Experience. Any of these methods could be the reason behind any leveling in Cardston.

2.2.4. KOINEIZATION AND FIRST DIALECT ACQUISITION CHANGES. The creation of new dialects from existing ones can be discussed as the result of a mechanism called "koineization". Kerswill and Williams (2000) outline the factors involved in the creation of a koine, an intermediary dialect akin to the position a creole takes between two languages. They found that young speakers forsook the patterns of their parents in the face of more standard features, creating a koine made of primarily unmarked language features. This was remarkably present in the vowels, the children using London or RP

vowels in place of the native southeastern set, but they found that /θ/ is still fronted to /f/ (along with /ð/ fronting to /v/) and that /t/ is glottalized, as in the southeastern dialect. They point to ordered principles (guidelines rather than rules) for predicting koine formation. They find that majority forms prevail, and that this is more important than regional forms being disfavored, but that the latter is also essential. They also found that network socialization played an important factor in these youths' language change. Peers were far more influential than caregivers after age four. In that way, children with higher social indexes—more friends—changed more quickly (and likely more completely) than lower class children. The children's use of the fronted fricatives may be indicative of a majority non-standard becoming a local standard because of its pervasiveness, leveling the varied incoming dialects' choice, whereas the standard vowels may be indicative of a monolithic idea of RP or London speech being imposed by the incoming populace.

If a similar situation once existed in Southern Alberta, differences include the location of the boundary between these dialects (isogloss), the population density of the surrounding area, and the fact that only one dialectal form (Utah English) was being introduced into an area with one fairly monolithic native form (Canadian English). Implications, however, continue to abound: network socialization in the insular Mormon community could have led to slower adoption of Canadian forms. Further, geographical distance from Lethbridge may have made the Utah form “standard” instead of marked for youth in the area. The eventual immigration to Cardston of non-LDS Canadians may have made the koine effect occur later in the town's history, comparatively.

If historical Utah English speakers assimilated culturally to their religiously different neighbors (religion does not appear to be a heavily-studied sociolinguistic factor

for areas with a demographic that meets the average distribution of faiths, and thus there is not much to compare it to), we could see a bit of the opposite phenomenon.

Immigrants might not be contributing to the local dialect as much as adapting to it, and there is hardly anything that indicates that there are limits to what can change. It could be anything or everything that associates the derivation of the historical form to its modern cousin, or it could be hardly anything.

2.3 THE PHONOLOGICAL FEATURES OF UTAH ENGLISH AND GENERAL CANADIAN ENGLISH.

In order to understand the phonological underpinnings of the study, an understanding of the details of Utah English and those of General Canadian English is necessary. I will explain both below:

2.3.1. UTAH FEATURES

The features of Utah English examined by this study are as follows:

1. The *cord-card* merger, in which /or/ merges with /ɑr/.
2. Pre-lateral vowel laxing, in which tense vowels become lax before /l/.
3. Vowel shifts in *milk* and *pillow* which are related to pre-lateral laxing Vowels in this case, are lowered before /l/.
4. Epenthesis of /t/ in the cluster /ns/.
5. Reduction of /ey/ in days of the week (e.g. *Tuesday*) to /i/.
6. Fronting of /ŋ/ to /n/ syllable-finally. This was noticed by the researcher and has not been documented in any research that could otherwise be found.

Relevant research that could be found regarding these features is presented for further reference:

2.3.2. THE *CORD-CARD* MERGER. One of the difficulties in discerning whether the target area (LDS Southern Alberta) uses Utah-like features is the fact that no one feature is purely native to the region. Like all other dialects, features overlap with neighboring dialects, and none of them are, by themselves, unique identifiers. That being said, some of them are much more heavily in use within the speech community in question.

An important feature of older Utah English is the merging of the vowels in “cord” and “card” toward that of “card.” Bowie (2004) finds a vector by which Utah English is significantly different from other varieties, even historically. In a survey of the cord/card merger in the state during the late 1930s, the merger was heavily realized post-glide, and in words of a specific historical class. These historical classes are simplifications that allow words with phonetic/phonemic similarities in some varieties to be grouped together (Bowie references Labov 1994 in his explanation). A word like *core*, which is losing its open-o sound, is different from a word like *corps*, which is not. Bowie refers to the class of the *cord-card* items as the (ɔr/ɑr) class, but it is not apparent what, if any, historical origin differentiation exists for this categorization. Analysis of the speech of LDS church leaders in the area recorded during public address shows a propensity for those born in the 1880’s to merge /ɔr/ words to /ɑr/, primarily according to the previously mentioned conditions. Of note is the phenomenon documented that “war” was merged more often than “born” in the late twentieth century as well, previously thought to be based on the stigma of the merger, with “born” at the forefront of the stereotype. Bowie refers to Lillie (1998) in stating that “[i]t seems more likely that [this is] simply a continuation of the pattern seen in the mid- to late nineteenth century— that a preceding glide favors the production of [ɑr] much more strongly than a preceding voiced obstruent.” I have found

that Lillie’s explanation—that words thought to be indicative of a non-standard variety are consciously corrected to the standard—is not entirely without merit (as in Labov 1964) and that more subtle items are often realized with the full merger. Specifically, though this may be too much a sidebar, I have heard “Laura” and “Taurus” to be realized with an [ɑr] rather than an [or]. I also note that a young lady named “Lora” from West Valley City, Utah made it a point to pronounce her name to the standard [lora] to avoid confusion during introductions.

There are other essential parts of this discussion in relation to the various other aspects of Utah English and his explanation of the subject matter. Bowie mentions other mergers as possible subjects: feel/fill, fill/fell, fail/fell, and fool/full (which will be discussed in depth later), as well as the pen/pin and cot/caught. Further, Canadian raising was mentioned as something to look at with regard to Utah English. Certainly this work is intended to further the understanding of the relationship of Utah English to a Canadian variety, and will touch on this, but, even further, if raising has been part of natural Utah production, possible explanations for the variance of the two speech communities in Alberta become more a matter of differing dialectal histories, growing somewhat independently, rather than the LDS speech community assimilating raising as a part of social integration.

2.3.3. LAXING. Vowel laxing is the merging of tense vowels with lax. The laxing of vowels prelaterally has been found in Utah English—this creates mergers for feel/fill, fool/full, and fail/fell. DiPaolo and Faber (1991) analyze a previous claim by Labov that

certain vowels merge before dark-l in Salt Lake City and Albuquerque. They note that an Albuquerque respondent believed that “fool” and “full” were homonyms at age 14. In a commutation test, they found that non-natives to the area had difficulty determining which of the responses represented “full” but did get nine of ten “fool” responses correctly. This implies a difference between the vowel-sounds in the items, but also implies a near-merger because of this one-sided lack of distinction. The authors note evidence for pre-lateral laxing in the Salt Lake Valley area as well, noting creaky voice in some of these pre-lateral vowels, which increased in frequency inverse to age, like the pre-lateral laxing trend.

The researchers’ study involved a spectral analysis of vowels in these environments, locating the formants for the naturally lax vowels and the laxed vowels. They found fronting in the back lax vowels in the younger respondents, but little or none in the older respondents. The mergers themselves appear to occur only in certain formant frequencies (F2 for front vowels, F1 for back vowels). Principally, their findings are that the pre-lateral lax tendency is not actually a merger, but a situation in which vowelspace overlap. Assuming the study’s findings are accurate, seeing a similar pre-lateral lax in Southern Alberta implies a continuing sociolinguistic correspondence with Utah—in other words, a “Mormon language” rather than a simple historical relationship.

McElhinny (1999) analyzes this same pre-lateral laxing in Pittsburgh, as well as /l/-vocalization (word-finally, as in Brazilian Portuguese, not pre-consonantly, as in Appalachian English). She finds the same pattern as DiPaolo in that the pre-lateral laxing phenomenon may be leading to a reversal rather than a merger. She also notes that vowel lengths start to merge in these situations (toward long), a fact that is attributed in the

paper to a configuration of the syllable that allows for a distinctive place for diphthongal glides in the nucleus, rather than conflating diphthongal nucleus and offglide (or onglide and nucleus) into one place in the syllabic nucleus. This mechanism allows for dark-l to be moved to that offglide spot, transforming it to its nearest glide: /w/. Or, in physiognomic terms, moving the tongue from a vowel position (especially a low one) to the dark-l position could be simplified by just getting it most of the way there, producing a sound very similar to /w/. Pittsburgh sits at the confluence of the dialect boundaries of all three major American dialects. If this is to be seen in the same way that DiPaolo sees the Utah rendition of this speech pattern, it could indicate a Southern influence. If the LDS Albertans have a similar pattern, it appears that influence came with the Mormon influx (Alberta being itself very far removed from any Southern Shift area).

2.3.4. EPENTHESIS. Epenthesis of /t/ into the /ns/ cluster is not a specifically Utahan trait, but the trends that have been shown by Yoo and Blankenship (2003) do not appear to hold true for the Utah patterns that this researcher has experienced (in which the epenthesis occurs word-medially and after the stressed syllable), as Yoo and Blankenship find that particular position to be the least likely to elicit epenthesis. Epenthesis in this specific environment may not be only Utahan, however. It may be more generalized than that.

2.3.5. MONOPHTHONGIZATION OF /EY/. Pederson (1967) notes *Tuesday* with an /i/ final vowel in Marion County, Missouri, and as much of the state patterns with the U.S. West

(Labov 1991), this feature may be in use in Utah and Western Canada. It has been noted in Utah by the author, but may not be unique to the area.

2.3.6. CANADIAN FEATURES

The General Canadian English features examined by this study are as follows:

1. Canadian raising, in which /ay/ and /aw/ are raised to /Λy/ and /Λw/.
2. The production of /ɔ/ in *stone* and rhyming words.
3. The /a/ vowel in borrowed words pronounced as /æ/.
4. The /æ/ vowel in *bag* and rhyming words pronounced as /ey/.
5. The diphthongization of /u/ as /ju/.
6. Stress being placed on the first syllable of *adult*.
7. The vowel /ɛ/ in *against* being pronounced as /ey/.

Additional information from relevant research regarding these features follows.

CANADIAN RAISING

The most salient feature in Canadian English is that of the raising of the nuclei of /ay/ and /aw/ to /Λy/ and /Λw/. This feature is to be found in parts of the U.S. that border Canada, and there are other similar raisings to this that may or may not be historically related to the traditional Canadian version. In the aforementioned ethnicity study in Montreal, Boberg mentioned that Montreal raising was higher than general Canadian raising, nearing a *loin-line* merger. Roberts (2007) notices a “Vermont Lowering”—a leveling occurring after a non-Canadian-type raising became marked. This raising involved a raised and fronted /aw/ and a centralized and backed /ay/, which is dying out

as the newer generations of speakers adopt a more standard pronunciation of these vowels.

Boberg (2000), previously mentioned, discusses the pronunciation of /a/ sounds in borrowed words as /æ/ in American and Canadian speakers. An exhaustive report of the trend is given in Boberg's doctoral dissertation (1997, Univ. of Pennsylvania), but the general trend is that Canadian speakers do this much more frequently than U.S. speakers. Words that contain /oun/ in U.S. English are /ɔn/ in Canadian English (Boberg 2000), a fact that has been documented since even the early 20th Century (see Pound, 1939).

2.4 RELATION TO PREVIOUS LDS CANADA STUDIES. In relation to Canadian raising in general, Meechan notes that /aw/ varies not just between LDS and non-LDS respondents, but also between Catholics and Protestants. These data, however, do not indicate as vast a disparity than as the one defined by the LDS/non-LDS dichotomy). In general for all respondents, raising was in effect far more often in environments that produced the diphthongs as in a non-front area of the vowel backness spectrum. The mid-range was the most conducive to raising, and the back was in second place overall—the front was generally not conducive to raising. However, for the Mormon respondents, these last two were reversed: the back was not often raised at all. In fact, Meechan points out that back /ay/ is “low especially for the Mormons.” (44)

She found, further, that an entire environment—that of following stress—was significant in light of Mormon responses, but not useful in describing the patterns of non-LDS respondents, and finds that the LDS version of raising may be “subject to different grammatical processes” than its counterpart. (46) This brings up the question of how the

assimilation of speech traits occurs with regards to environments and rules (as even if Meechan's assertion of a grammatical disparity were proven incorrect, some difference in the perception of environment or a different construction of phonological rules has to be to blame for the distinction).

Further understanding of the environment that might describe the differences in actuation between original Canadian settlers and the later LDS influx can be gained from the discussion of Meechan's findings in regards to manner of articulation's effects. Apparently manner is inconsequential to LDS production of /ay/ but important for /aw/, but is important in non-LDS production of both diphthongs. As /aw/ is the more obvious of the two targets of this process, the explanation of the phenomenon is complicated. The distinction between Mormons who claim U.S. Heritage and those who do not is clearly demarcated along the axis of frequency of raising occurrences.

Meechan herself indicated two possible explanations for the disparities between the LDS and non-LDS productions—the distinction between why Mormons and non-Mormons immigrated to the area, and the social separation between Mormons and their non-Mormon counterparts. The second is more interesting; if there really is such a general gap between the Mormon community and others, a vehicle for maintaining a Utah subdialect is posited, but the probability of its being maintained in a unilectal manner in the face of a vast Canadian English is minimized. Linnes (1998) notes that African-American Vernacular English (AAVE) is spoken even among African-Americans that were raised in a primarily Southern American English (SAE)-speaking environment, but that both dialects were used in native environments. In fact, she finds that the working and child-rearing generation (ages 30-54) used less AAVE than their

children (or the next generation in general). These children were raised in a majority SAE environment by parents who overall spoke more SAE than AAVE. Linnes notes: “Either their speech patterns are not entirely the product of their socioeconomic milieu, or AAVE is not restricted to working-class speech communities.” (348) Relative to the Southern Alberta issue, there is a marked dialect in the study (AAVE) that maintains itself (despite ebbs and flows) among a majority unmarked dialect (SAE), and the same situation can be seen in Southern Alberta, with the Mormon variation as the marked speech pattern and the general Western Canadian dialect as the unmarked.

The point of building on Meechan’s work is to find the extent of the influence of “Mormon language” on these speakers—whether the LDS speakers do more than just raise /ay/ and /aw/ differently. Their speech could include some Utah markers due to their provenance from that area, and may also include the weakening of other Canadian markers. This study will determine the effect of religion on the speech of LDS and non-LDS communities in the area, both in distinguishing the speech patterns of the LDS and the non-LDS respondents, and whether LDS patterns have become common even among non-LDS respondents in the area.

2.5 SUMMARY OF LITERATURE REVIEW. A number of sociological factors are commonly examined in sociolinguistic inquiry as catalysts for change, or barriers that maintain dialectal homogeneity. Age, gender, socioeconomic status, ethnicity, and region of origin have been studied as such, and there are many others. Religious affiliation has been studied, but not extensively, in this regard. It is how this affiliation affects social networking and therefore language change that this study examines.

A number of theoretical mechanisms exist as methods for explaining the changes studied by sociolinguists, some of which may apply to the study at hand. The generalities of leveling and maintenance of dialects were reviewed, followed by a discussion of social networks' influence (as in Milroy 1980) on those phenomena. Network dialect propagation is going to be assumed to be the primary mechanism at work in this study, as the LDS community comprises a large social network. Further explanations of dialect propagation, however, are still useful. *Ethan's Experience* (Chambers 2002), in which child language levels to the standard despite parents' dialect may be useful, as well as the idea of koineization (Kerswill and Williams 2000), in which intermediary dialects form from multiple sources. Both could be at work in explaining how LDS language differs from non-LDS, or how far it has leveled. The Gravity Model (Trudgill 1974) of dialect influence may be used in tandem with the social network theory, in that the influence studied may be due to the strength and size of the networks. This theory, however, serves better as a counterpoint to the influence of the social network in maintaining the dialect despite the mass of influence of General Canadian on the area.

A review of the speech patterns to be observed was given, and further review of Meechan (1998) and its relative importance was reviewed. In her study, she found evidence for LDS English speakers in the area using General Canadian features differently than non-LDS survey participants.

CHAPTER 3: METHODOLOGY

The purpose of this study is to determine whether or not there is a difference between LDS and non-LDS residents of Southern Alberta, Canada in their use of Canadian and Utah English phonetic features. To accomplish this task, a method of field study was designed and carried out, using funds from the Charles Redd Center for Western Studies at BYU, in their Summer Fellowship for Upper Division Students and Graduates program. The trip and survey were performed between August 19 and 24, 2007. The nature of the survey and its participants, as well as the method of analyzing the results will be detailed in this chapter.

3.1 INFORMANTS. Those surveyed were 18 years of age or older, living in Southern Alberta (specifically in the area including Cardston and the Boundary Creek area). The qualifiers in determining who could participate in the study were a) age; and b) that they spent a significant amount of childhood time in the area (at least from ages 9-16; nearly all were born in the area or came much earlier than that). Care was taken to make sure that, if respondents had only been in Cardston for a short period recently, that there had been a long period of continuous residency previously. There were three participants did not currently live in the area, but who had recently relocated but were back visiting their families. Respondents were asked where else they had lived. All those who had lived for a part of their childhood in other places were in the youngest group of informants (18-29) and had been in Ohio, Saskatchewan, and northern Alberta (areas unaffected by this

Utah/Canada divide), and had not been out of Cardston more than three years. All three claimed to have “grown up” in the Cardston area.

The primary factors examined in this study were gender, age, and religious affiliation. So as to determine the significance of each, they were divided and quantified as follows:

Age was divided into the following groups: 18-30, 31-55, 56+.

Gender. Male and female.

Religious affiliation. LDS and non-LDS.

Educational background was considered, and due precaution was taken to ensure that an appropriate range of educational backgrounds was obtained. Primarily, this range occurred naturally, but a non-informant local was able to help the researcher set appointments according to the needs of the study. Since age, gender, and religious affiliation were the variables of interest in this study. Table 3.1 provides a demographic breakdown of respondents.

Table 3.1: Breakdown of respondents by age, gender, and religious affiliation.

	18-30 Avg = 22.56 Std. Dev. = 3.97	31-55 Avg = 48.0 Std. Dev. = 5.82	56+ Avg = 65.89 Std. Dev. = 7.06
LDS Males	5	7	8
LDS Females	7	6	8
Non-LDS Females	1	2	0
Non-LDS Males	3	2	2

Of the 51 respondents to the survey, 10 were not LDS and 41 were LDS. Along the gender lines, 45% were female (n=23) and 55% were male (n=28), though only 30% of

the non-LDS respondents (n=3) were female while 51% (n=21) of the LDS respondents were female. Divided by age, 31.3% were in the group that spans 18-30 (n=16), 33.3% were in the group that spans 31-55 (n=17), and 35.4% were in the 56+ group (n=18). Of the youngest group, 50% were female, 50% were male (n=8). Of the 31-55 group, 44% were female (n=7) and 56% were male (n=9). Of the oldest group, 44.4% were female (n=8) and 56.6% were male (n=10).

A dataset from a female respondent that would have been in the second age category was discarded because the respondent did not attempt to respond naturally. Her inflections and pronunciation were clearly affected in a number of the responses, and the bulk of these responses were obviously not given in a natural manner. They did not correspond to the patterns exhibited in the pre-survey interview, or in other observed, non-recorded speech.

Informants were found primarily through a networking system. Specifically, a local resident (who herself was ineligible to take the survey, having grown up in Florida in the U.S.) contacted a majority of the interviewees, relieving the researcher of the stresses of finding informants, and the informants of the discomfort of being spontaneously contacted. After surveys were concluded, respondents were asked if they knew of anyone who would have time to answer the questions just posed to them. Many of the non-LDS respondents were contacted in this manner through another person ineligible to take the survey, a neighbor of respondents who had taken the survey already. A number of the respondents were found through these networks, and others were contacted at LDS church services on Sunday.

Some informants were more consistent in their responses than others. Though the first responses were the ones counted in the dataset, some were aware that they may have said things that did not correspond to the way they would have spoken non-elicited items. For example, one respondent used /a/ not /æ/ for borrowed “a”, and was cognizant of the fact that he normally would have used /æ/. The author of this thesis proposes that these were extreme exceptions and did not significantly alter the state of the data or the resultant analysis, as three respondents commented on this phenomenon, in general regarding only one or two survey questions.

3.2. THE SURVEY INSTRUMENT. A survey was selected over the other possibilities (open-ended interviews, observation, etc.) because of the simplicity of the survey mechanism. A survey fit the needs of the study in that individual items could be analyzed and, for the most part, were guaranteed to be elicited. More open-ended instruments may still yield a number of the desired items, but with less control over the number and type of responses. Observation would have yielded the least margin for error (as far as “naturalness” is concerned), but would have caused serious difficulties in obtaining the right data, as the study is concerned with a small percentage of possible speech items. Specificity of data makes the survey the most effective instrument for this study. (See Appendix A for a total list of survey questions.)

The survey instrument administered to the informants consisted of seventy-four questions designed to elicit responses to show the prevalence of Canadian features and Utah features. The questions were written in such a manner as to only allow for one word responses, and were as succinct as possible (e.g. “What do you call frozen water?”

(ice)”) . Some questions were taken with permission from an instrument designed by Bowie and Baker, others were my own design. The survey method will be described later in this chapter, but the instrument was designed to be delivered quickly so as to increase the ability of the researcher to network effectively.

The following eight features were selected to determine the extent of Canadian dialect influence on speakers in the study (note that points of data based on vowel changes in rhyming words will be referred to by an exemplar in caps): (1) Canadian raising of /aw/ and /ay/ (represented by ten questions, with both affected diphthongs represented, as well as a range of following sounds—see Boberg (2008) and Meechan (1998)), (2) borrowed /a/ (represented by five questions, ranging in likeliness to elicit an /æ/), (3) /ju/ vs. /u/ (three questions), (4) STONE: /o/ in “stone” (three questions), (5) SORRY: /o/ in “sorry” (two questions), (6) BAG: /æ/ in “tag” (three questions), and (7) a question each of two miscellaneous Canadian features—stress in “adult” and /ey/ in “against”.

The following features were selected to find the Utah influence on the speakers, which will determine to what extent the religious and cultural background of the LDS respondents affects their current pronunciation: (1) pre-lateral laxing and/or lowering in four categories (12 total from /ey/ to /E/ in “fail”, /ɪ/ to /ɛ/ in “pillow”, /i/ to /ɪ/ in “feel”, /ʌ/ to /oʊ/ in “full”), (2) cord-card (three items, notably “Laura”), (3) consonantal epenthesis in nasal-consonant clusters (the tendency to pronounce “pencil” /pɛntsəl/; three items), (4) /ŋ/ to /n/ syllable-finally (three items from two questions), (5) t-glottalization (one item) and (6) /deɪ/ to /di/ in days of the week (one item).

3.3 PROCEDURE. Informants were found by asking a member of the community for leads to people of a certain demographic, and networking from there—interviewees were asked for more leads and so on. Important to obtaining a natural set of responses was a pre-interview attempt to gain the trust of the informant. Often getting the respondent laughing or talking about him or herself was a good indicator. Further, for some of the younger respondents (and the older ones on occasion), making the interview process a game by rapid-firing the questions made the experience more fun.

Surveys were conducted primarily in the homes of interviewees, and recorded on a Panasonic RQ-L10 handheld recorder with Sony HF 90 minute tapes (and one TDK D60). Each individual survey took between five and twenty minutes depending on the length of time the informant took conversing previous to the survey, and how long the informant took to arrive at each elicited word. Introductions were made first, and then some questions regarding background were asked while the tape was rolling (in which the researcher asked the participants their residential background and religious affiliation, as well as other, variable questions as they arose). From there, the survey was administered. It is important to note that the words elicited were static, though the questions were not. As the process of surveying informants progressed, for example, the question for “cow” became “What is the animal we get milk from?” rather than “What’s the female counterpart to a bull?” The item “Laura” had to be spelled due to a lack of recognizable public figures with that name.

When respondents were unable to respond with the desired item, the question was repeated. If that failed, the first letter was given. Other than “Laura”, informants had to be given the first letter of the item on average twice in an interview, generally from a

group that included “process”, “Johnson”, “pencil”, “fencing”, and “Nevada” as the most difficult (there were others that were of moderate difficulty). There were about four first letters given per survey, and between one-fourth and one-third of the items were asked for more than once. The first step was to repeat the question. If it was clear that the informant understood the question, the first letter of the item was given.

If the above did not yield the correct item, the question was rephrased. Rephrasing the question occurred about once an interview. If the rephrase didn't yield the correct response, the item was either spelled or skipped. It was skipped if it was concluded that spelling would either interfere with pronunciation or result in a pronunciation that would be unnatural for the speaker. Skipping and spelling were roughly equally performed; both happened about once every two surveys, but this unevenly. Some surveys have a number of skipped items, which tend to be associated with old age or low education level, but are more unpredictable than that.

Though they do not figure into the statistical analysis, the conversations previous to the actual survey were recorded as well, for reference. In the case of the one participant whose results were discounted the comparison between survey items and pre-survey dialogue resulted in the rejection of the associated data, as discussed above. This conversation proved conclusively that, for one reason or another, the informant was not responding with items that were similar to those she would have used in non-elicited speech. In other cases, pre-survey conversation simply verified that the data received from the respondent during the survey is accurate, in accordance with the patterns observed during normal speech.

The questions were asked in the same order each time, with minor exceptions, which exceptions had little to do with the informant, but the very rare occasion that a question was accidentally not posed. This did not appear to affect the data in any way—few of the data gaps were in groups that did not have many other related examples. Care was taken to make sure the interviewees were comfortable with the experience. Pre-survey questions did include things such as age, provenance, and religious background.

As a summary, the steps taken in the interview process were as follows:

1. Informants were located through networking.
2. Informants were apprised of the length and nature of the survey.
3. A short informal conversation was recorded.
4. The interview was conducted. If items were not able to be elicited, an attempt was made to start the informant off with a letter or other non-rhyming clues.

If this was still impossible, the item was skipped.

DATA ANALYSIS

Data was reviewed from the tapes and analyzed by the researcher. To assist in this, a table with all the elicited words was drawn up, and on listening, a mark was made indicating what type of response the informant gave. For example, if the word were “house”, the informant either said something that was Canadian or not Canadian. The following were the criteria:

For Canadian Raising, the nucleus of the vowel was of primary interest. A wedge-sound (Λ) indicated Canadian Raising, while (a) or (æ) indicated otherwise. Anything higher than (a) or (æ), but lower than wedge was marked “similar to

Canadian”, and was considered Canadian for statistical purposes. For /o/ in “stone” and /o/ in “sorry” a similar tactic was used—anything approximating the Canadian pronunciation counted. The issue of borrowed-a was exceptionally straightforward; no respondent used a vowel between /a/ and /æ/ that did not resolve to one vowel or the other after being asked to repeat. There was more of a gradient of responses for the BAG set because sounds in the vowelspace between /æ/ and /ɛ/ seemed to attract responses, but in general the process was still straightforward. Initial stress on “adult” was also straightforward.

The features indicating Utah influence were significantly more complicated. Pre-lateral laxing was analyzed in much the same way as the rest of the vowel-change features, but the epenthetic /t/ in nasal-fricative clusters were difficult to discern, especially in audio playback. The item was only listed as having an epenthetic /t/ if it was very clear—the break between the nasal and the fricative had to be more than just the transition between a nasal and a fricative, and it had to be clear that a stop was being articulated. Similarly difficult was the consonantal shift /ŋ/ to /n/ syllable-finally—the [n] had to be clearly pronounced if it was to be marked as containing a Utah feature. The rest of the Utah features (t-glottalization, /di/ for /dej/, and cord-card) were straightforward as well—though cord-card follows the same pattern for detection as the other vowel-based features: anything between “cord” and “card” was considered “card”.

Data was analyzed inferentially first, and each group as shown in each of the cells Table 3.1 was considered a demographic unit. If the units containing females, for

example, had a significantly higher rate of use for a particular item or set of items, it was taken that gender was important for that feature's use. Even seemingly insignificant differences can be telling, if they are coupled with other factors (if, again for example, younger LDS respondents were insignificantly higher in the use of laxing in the POLE set, but significantly higher in the use of laxing in the FAIL set, the factor may still be used).

To determine *statistically* significant differences between LDS and non-LDS participants, a series of two-way (group [LDS vs. non-LDS] by feature) ANOVAs were performed on the data using the statistical analysis software SPSS. The dependent variable in each of these was the number of times each participant used a Utah or Canadian feature. In addition, to determine if gender or age were also important predictors of language use, two linear step-wise multiple regression analyses were also performed with the total number of Utah or Canadian features as the dependent variables and age, gender, religious affiliation and educational background as predictor variables.

A step-by-step procedure for the data analysis:

1. Data were categorized by Canadian/non-Canadian and Utah/non-Utah patterns by the researcher. These were verified in a sample by the thesis adviser.
2. These results were analyzed for obvious patterns in an inferential manner.
3. The results were then analyzed two-way ANOVA and linear stepwise multiple regression.

CHAPTER 4: RESULTS AND DISCUSSION

4.1. GENERAL OVERVIEW. The purpose of this study is to determine whether LDS native English speakers in Southern Alberta, an area whose history prominently features Mormon colonization, are more prone to use Utah speech features and less likely to use Canadian ones than their non-LDS counterparts, and to determine the vitality of those features in the local speech. To that end, the data gathered from the recordings performed on site in Cardston was analyzed to discover whether speakers had significant features in common with Utah that are not also typically Canadian, and whether these patterns were more common in LDS respondents. Further explored are respondents' Canadian patterns—whether LDS speakers use the same features as would be expected of other Canadians in the area, and whether religion is a factor if Canadian feature usage is mitigated.

In particular, this study sought to answer the following question:

1. Do LDS and non-LDS English speaker inn the area differ in their use of Canadian English features?
2. Does the speech of LDS Southern Albertans share phonological features with speakers of Utah English? If so, which have survived and why?
3. Is religion the underlying factor in determining the phonological features used by Southern Alberta English speakers? How does religion interact with other sociological factors such as age and gender?

4.2 UTAH-LIKE PATTERNS. Primary in the study of the influence of Utah English on the English of Southern Alberta is the presence of Utah English features in local speech. I examined the prevalence of Utah features in the speech of LDS and non-LDS respondents, with a focus on how frequent the Utah features (that do not occur natively in Canadian English) occurred in LDS speech and a secondary objective of determining whether Utah patterns may have transferred to local non-LDS speakers. A discussion of these features, including their distributions in the dataset follows, as well as a discussion of inferential statistical analyses of the data. These statistics will determine the significance of the difference between LDS and non-LDS respondents.

4.2.1. *CORD-CARD MERGER*. The item “Laura” was one instance of the cord-card merger that the researcher suspected would yield a diachronic view of the change in the merger. An interesting thing about the markers intended to show cord-card (“Laura” plus “war” and “born”) is that only “Laura” showed any significant response for the merger. The pronunciation /lɑrə/ was produced by 28% of respondents, all of whom were LDS. It will become apparent later in this section that age was the most important factor here, but that should not overshadow the fact that the trend was only among the LDS respondents. The trend was also primarily present in older respondents, indicating that it is not continuing. Again, only LDS respondents used the merged vowel in their production of “Laura”. Female LDS respondents were both more likely to use the merged vowel in general, and more likely to use it at a younger age. The data show a clear split between LDS and non-LDS respondents, and that apparently men are leading out in the change

away from the merger. The data do not show the feature spreading into the general speech of the area, nor do they bear on LDS respondents' use of any Canadian features.

Laura as /lɑrə/	LDS		Non-LDS	
	Male	Female	Male	Female
18-30	0/5	1/7	0/3	0/1
31-55	1/7	3/6	0/2	0/2
56+	5/8	4/8	0/2	--
Total /lɑrə/	6	8	0	0
Total Responses	20	21	7	3

Table 4.1: *Laura*

Figure 4.2 shows a more graphical representation of the *cord-card* data for *Laura* by age of respondent, independent of religious affiliation—it can be seen from the chart that the merger occurs in increased frequency with increasing age, likely indicating that the merger is dying in this speech community.

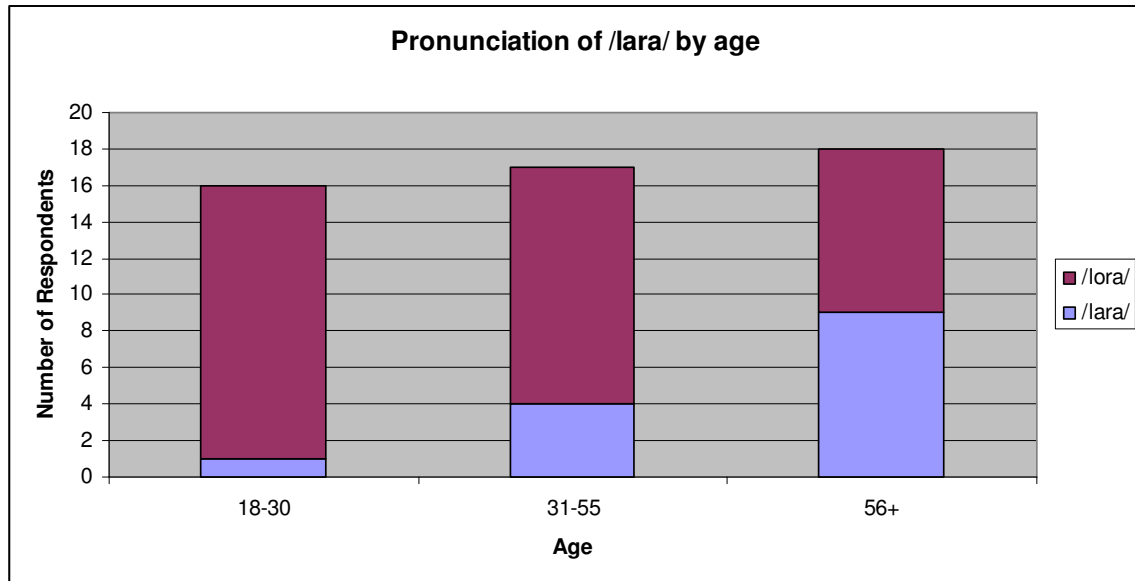


Fig. 4.2: *Laura* by age.

The other tokens, “war” and “born” were produced with /ɑ/ a total of once between them—by a young, non-LDS respondent, who used that vowel for “war” but not for “born” or “Laura”. It appears that whatever linguistic function maintained “Laura” did not maintain the other cord-card vowels researched—sociolinguistic factors appear more important than phonological ones here.

4.2.2. PRE-LATERAL LAXING VOWEL MERGERS. Other than “pillow” at 16%, pre-lateral laxing was not very prominent in responses. Pre-lateral laxing was observed in five different environments: *peel and heel* for /i/→/ɪ/ (HEEL set), *fail, jail, mail, and hail* for /ey/→/ɛ/ (MAIL set), *pull, bull, full, and skull* for /ʌ/→/ɒ/ (PULL set), *pool and school* for /u/→/ə/ (POOL set), and *milk and pillow* for /ɪ/→/ɛ/ (PILLOW set). I suspect that pre-lateral laxing is not a significant part of the Southern Alberta phonological inventory. Two respondents, talking before an interview, mentioned a local young man from Idaho

and cited “melk” and “pellow” as speech characteristics that set him apart. None of the non-LDS respondents used the pre-lateral laxing pattern, but very few LDS respondents ever did either. There were no identified age or gender trends in the data. The fact that some of the LDS respondents used the feature at all, though not conclusive in any way, does lend credibility to the idea that LDS speech in the area is different than that of non-LDS respondents, even if the feature is foreign to the area. No Canadian features are affected by this, and like *cord-card*, the feature has not seemed to spread to the non-LDS population. (See Tables 4.3-4.5 for demographic breakdowns for each part of pre-lateral laxing.)

MAIL set /ɛ/	LDS		Non-LDS	
	Male	Female	Male	Female
18-30	0/20	1/28	0/12	0/4
31-55	1/28	0/24	0/8	0/8
56+	0/32	0/32	0/8	--
Total /ɛ/	1	1	0	0
Total Responses	80	84	28	12

Table 4.3: The MAIL set.

There is little pre-lateral laxing occurring here in a set Di Paolo and Faber (1991) noted as a significant vowel to participate in the change. It appears that the change does not occur in the area, independent of religious affiliation.

PULL set /o/	LDS		Non-LDS	
	Male	Female	Male	Female
18-30	0/20	2/28	0/12	0/4
31-55	3/28	1/24	0/8	0/8
56+	1/32	0/32	0/8	--
Total /o/	4	3	0	0
Total Responses	80	84	28	12

Table 4.4: The PULL set.

The above table shows more of the same. Argyle et al. (2004) note pre-lateral laxing as a feature of younger Utah English, and these results are not well-defined enough to appear to agree that even the little laxing is primarily a youth phenomenon. The HEEL set had no /ɪ/ results. The POOL set had one /ʊ/, produced by a 45-year-old LDS female.

PILLOW set /ɛ/	LDS		Non-LDS	
	Male	Female	Male	Female
18-30	0/10	1/14	0/6	0/2
31-55	1/14	0/12	0/4	0/4
56+	0/16	0/16	0/4	--
Total /ɛ/	1	1	0	0
Total Responses	40	42	14	6

Table 4.5: The PILLOW set.

The results from the PILLOW set, which the author has heard very commonly in Utah as at least a folk-linguistic stereotypical feature (i.e. when Utahns exaggerate their accent, *melk* and *pellow* are often cited), indicate that the feature has not spread to Southern Alberta. It is interesting to note this, as a feature associated with the young, it may be that the only features to spread to the area are ones that the immigrants brought with them.

4.2.3. STOP EPENTHESIS. Epenthesis of stops in stop-fricative clusters was fairly common (roughly 20% across all three questions that elicited it. Items used in to exemplify this pattern were *pencil*, *Johnson*, and *fencing*. The non-LDS responses to this question do not show much variation from the LDS ones—four out of thirty responses, not so much less than the 20% from the general findings, also epenthesized. Age does not appear to be a factor, and LDS respondents did not participate in this pattern any more than non-LDS ones, with the exception of older LDS women.

PENCIL set /nts/	LDS		Non-LDS	
	Male	Female	Male	Female
18-30	1/15	5/21	1/9	0/3
31-55	3/21	5/18	2/6	0/6
56+	1/24	11/24	1/6	--
Total /nts/	5	21	4	0
Total Responses	60	63	21	9

Table 4.6: The PENCIL set.

This appears to be useful, but only in one regard: older LDS women used the feature. Other than that, there is not much to divide the religious, age, or gender groups. Older LDS females are not generally outliers in other features. The author believes this to be strange, but not necessarily relevant, unless there could be found evidence for the epenthesis existing in late 19th Century Utah, being brought with the immigrating party.

4.2.4. MONOPHTHONGIZATION OF /EY/. The vowel shift from morphological “-day” in “Tuesday” from /ey/ to /i/ was reasonably common, observed in 24% of responses. Age appears to be the factor of choice here, with even a non-LDS response to the same effect. It appears that this may not be a “Utah” factor, but a general Western North American one. It seems that this was not an important factor in distinguishing LDS from non-LDS speech in the area.

/i/	LDS		Non-LDS	
	Male	Female	Male	Female
18-30	0/5	0/7	1/3	0/1
31-55	1/7	0/6	0/2	0/2
56+	5/8	4/8	1/2	--
Total /i/	6	4	2	0
Total Responses	20	21	7	3

Table 4.7: *Tuesday*.

It appears that the older respondents used the pattern, but that it is dying out across the board, independent of religion. This pattern can be heard in film and television

as indicating older inhabitants of the North American West, so it comes as no surprise that no division was found other than age.

4.2.5. ENGMA-FRONTING. Production of /in/ as /in/syllable-finally was not particularly common (*pingpong* and *building* were elicited, the former constituting two items), having been produced only eleven times out of a total 153 elicitations—three items elicited from the 51 respondents. Only one was not LDS, but that accounts for 9% of responses. It does not appear that this factor is significant.

BUILDING /in/	LDS		Non-LDS	
	Male	Female	Male	Female
18-30	1/15	6/21	0/9	1/3
31-55	1/21	2/18	0/6	0/6
56+	0/28	0/28	0/6	--
Total /in/	2	8	0	1
Total Responses	60	63	21	9

Table 4.8: The BUILDING set.

Female LDS respondents led out in this factor as well, but the younger ones seemed to be most likely to do so. It would be interesting to repeat the study of this feature in the future to see if percentage usage increases, but for now this possible emerging feature appears not entirely relevant.

To determine whether LDS and non-LDS respondents differed in their use of these Utah features, a two-way (group [LDS vs. non-LDS] by feature (the 9 Utah features examined in this study)) was performed on the data. The dependent variable was the

number of times each participant used each Utah feature. The analysis showed no significant effect of group membership ($F(1,50) = 2.97, p > .05$), nor a significant group by feature interaction ($F(1,17) = 2.97, p > .05$), but a significant effect of feature ($F(1,50) = 5.241, p < .0001$). These results indicated that the two groups, LDS and non-LDS did not differ in their use of any of the features of Utah English.

4.2.6. FURTHER STATISTICAL ANALYSIS. In addition to determining whether religion was an important factor in the use of Utah features, age and gender were examined as possible influences on the use of Utah features. To do this, a series of linear, step-wise multiple regression analyses were performed, with age, gender, educational background, and religious affiliation as predictor variables, and the number of times each participant used each Utah feature was the dependent variable. The results of these analyses showed that for the cord-card merger, stop-epenthesis, engma-fronting (/ŋ/ becoming /n/ syllable-finally), and the suffix “-day” turning to /di/ the stepwise regression found age to be the most significant social factor (for engma-fronting, gender was also significant; all F 's $> 4.49, p < .03$). There may be some confounding occurring in the data because of the difficulty in locating older non-LDS respondents (and the difficulty in finding LDS respondents in general). This will be discussed more fully in the section that treats the Canadian features.

For example, as mentioned previously, cord-card was barren except for the item “Laura”—only one respondent pronounced “war” or “born” with /ɑ/ (“war” by a respondent who is not Mormon, and younger). For “Laura”, no non-LDS respondents used /ɑ/, but the stepwise regression still did not find religion a significant factor in the

trend. This may be a weakness of using stepwise regression for this purpose, or a weakness in that the dataset includes only one-fifth non-LDS respondents. Nonetheless, it can easily be seen that religious preference affects the use of cord-card patterns, and that for some reason (that will be discussed later), “Laura” was the only item affected by the merger.

The epenthesis of /t/ in nasal-fricative clusters did not pattern in the same way—religion was not an important factor in the feature’s production. A similar situation is found with the production of /di/ for “-day”. Engma-fronting was not widespread enough to be considered a significant part of the speech of the area, and the division, though the LDS respondents seem to use the feature more frequently than the non-LDS, data of that nature (four, five, and two out of 51 for the tokens in question, with one response being non-LDS) is not particularly trustworthy.

4.3. CANADIAN PATTERNS. The data was also examined for Canadian patterns of speech in order to understand whether LDS speakers in the area use the traditional Canadian features with less frequency than their non-LDS neighbors. Also examined is the possibility that speakers in the area regardless of religion use Canadian features less frequently than Canada as a whole.

4.3.1. CANADIAN RAISING. The Canadian English influence appears to be much more pronounced. The items elicited to study raising were *ice*, *fine*, *tie*, *line*, *drive*, *high*, and *bright* for /ay/→/ʌy/ (BRIGHT set) and *clown*, *house*, *cow*, *out*, and *found* for /aw/→/ʌw/ (HOUSE set). Raising preceding voiceless obstruents ranged between 36 and 68% per

item elicited. The highest percentage of raising for other environments was 18% for “clown”. Interestingly, female respondents aged 60 and over did not raise /ay/ as much as the norm—one out of eight for “ice” and two out of eight for “bright”. Meechan’s previously discussed difference between environments for LDS and non-LDS Raising is not examined, but taken as proven by her study. Especially for the HOUSE set, LDS respondents were less likely to raise than non-LDS respondents. It does appear that religious affiliation bears some influence in the production of this feature.

BRIGHT raised	LDS		Non-LDS	
	Male	Female	Male	Female
18-30	7/35	6/49	6/21	0/7
31-55	7/49	5/42	3/14	3/14
56+	7/56	3/56	3/14	--
Total raised	21	14	12	3
Total Responses	140	147	49	21

Table 4.9: The BRIGHT set.

This table is interesting in that it shows raising for BRIGHT not exceptionally common throughout the dataset. It does not appear to be particularly different along the axes of gender or age (other than the outliers previously mentioned) from the raw data.

HOUSE raised	LDS		Non-LDS	
	Male	Female	Male	Female
18-30	7/25	8/35	4/15	1/5
31-55	10/35	11/30	3/10	4/10
56+	2/40	9/40	6/10	--
Total raised	19	28	13	5
Total Responses	100	105	35	15

Table 4.10. The HOUSE set.

This table shows HOUSE raising more common, and again fairly uniform, it appears, across the board. Note, however, that inferential statistics may show a different viewpoint.

4.3.2. NATIVE-A. Items analyzed for native-a as /æ/ were: *pajamas*, *drama*, *karate*, *pasta*, and *Nevada*. No native-a as /æ/ occurrences were found outside of the items “pasta” and “drama”, but these two items were well-represented: “pasta” especially, with 66% of the total using /æ/. There were slight but appreciable differences between LDS and non-LDS respondents in this regard (for *pasta*), but not any real differences between male and female respondents, nor much difference in any regard for the other items.

/pæstə/	LDS		Non-LDS	
	Male	Female	Male	Female
18-30	3/5	6/7	2/3	1/1
31-55	4/7	3/6	2/2	2/2
56+	4/8	0/8	0/2	--
Total /pæstə/	11	9	4	3
Total Responses	20	21	7	3

Table 4.11. *pasta*.

It appears that religious affiliation is at least a factor here. It is interesting to note the general lack of older respondents' use of the feature, and that nearly all non-LDS respondents used the feature.

4.3.3. THE STONE AND SORRY SETS. The use of /ɔ/ in “stone”, “alone”, and “phone” was heavy as well, “stone” was produced with /ɔ/ 70% of the time, “alone” 52%, and “phone” 36% (perhaps because “telephone” was a common response to the question, shifting the stress of the word). “Sorry” and “process” were pronounced with /o/ 62% and 46% of the time, respectively. The non-LDS respondents used the Canadian English feature, /ɔ/ in this context, more than the LDS respondents, as predicted.

SORRY /ɔ/	LDS		Non-LDS	
	Male	Female	Male	Female
18-30	5/10	3/14	3/6	0/2
31-55	8/14	5/12	3/4	4/4
56+	9/16	11/16	3/4	--
Total /ɔ/	22	19	9	4
Total Responses	40	42	14	6

Table 4.12: The SORRY set.

The table shows how prevalent o-sounds (the author believes it to be open-o) in *sorry* and *process* are among the non-LDS respondents. This is one feature that the males appear to use slightly more than the females, and that is more prevalent among the older respondents.

4.3.4. THE BAG SET. The “bag”, “tag”, and “flag” set was pronounced with /ey/ 30% of the time for “bag” and “flag”, but 36% of the time for “tag”.

BAG /ey/	LDS		Non-LDS	
	Male	Female	Male	Female
18-30	3/15	5/21	6/9	2/3
31-55	7/21	5/18	3/6	2/6
56+	5/24	4/24	6/6	--
Total /ey/	15	14	15	4
Total Responses	60	63	21	9

Table 4.13: The BAG set.

The BAG set appears to be dependent on religious affiliation. Again, non-LDS respondents were much more likely than their LDS counterparts to use /ey/ in this set. The age and gender factors seem to be fairly uniform.

4.3.5. OTHER CANADIAN FEATURES (STRESS, /EY/, DIPHTHONGIZATION OF /U/). Stress in “adult” went on the first syllable in 76% of responses. The /ey/ was used in “against” in 24% of responses. Diphthongization of /u/ (/ju/) was only found in 12% of total responses (this includes both tokens elicited, with the “Tues-“ in “Tuesday” accounting for nearly all of it). These features may have important religious divisions, though they appear slight from this perspective (again, inferential analysis may change this).

Stress /'ædʌlt/	LDS		Non-LDS	
	Male	Female	Male	Female
18-30	3/5	4/6	2/3	1/1
31-55	4/7	5/7	2/2	2/2
56+	8/8	6/8	1/2	--
Total initial stress	15	15	5	3
Total Responses	20	21	7	3

Table 4.14: *adult*.

It appears that first-syllable primary stress in *adult* is just entirely common. The non-LDS appear slightly more likely than the LDS to use it, and there are no gender distinctions. It appears to be less commonly used by the younger respondents in the LDS category.

“against” /ey/	LDS		Non-LDS	
	Male	Female	Male	Female
18-30	1/5	1/6	0/3	0/1
31-55	2/7	1/7	2/2	0/2
56+	3/8	1/8	1/2	--
Total /ey/	6	3	3	0
Total Responses	20	21	7	3

Table 4.15: *against*.

Use of /ey/ in *against*, however, is not as common, and appears uniform across age, gender, and religious lines. It is likely not an important item in distinguishing LDS and non-LDS speech.

DUE /ju/	LDS		Non-LDS	
	Male	Female	Male	Female
18-30	0/10	1/12	2/6	0/2
31-55	1/14	1/14	0/4	0/4
56+	2/16	5/16	0/4	--
Total /ju/	3	7	2	0
Total Responses	40	42	14	6

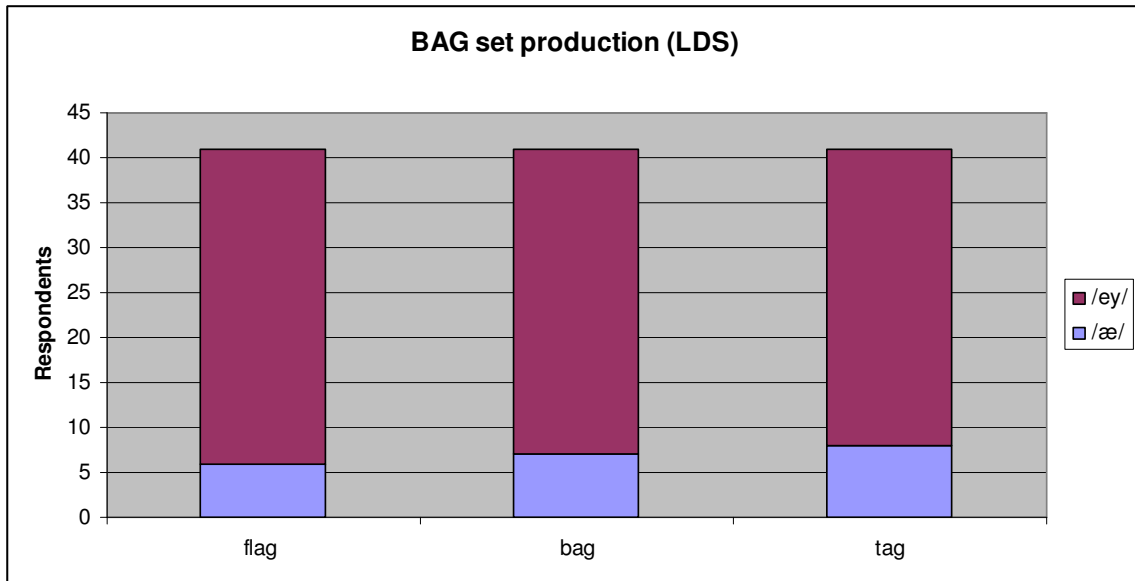
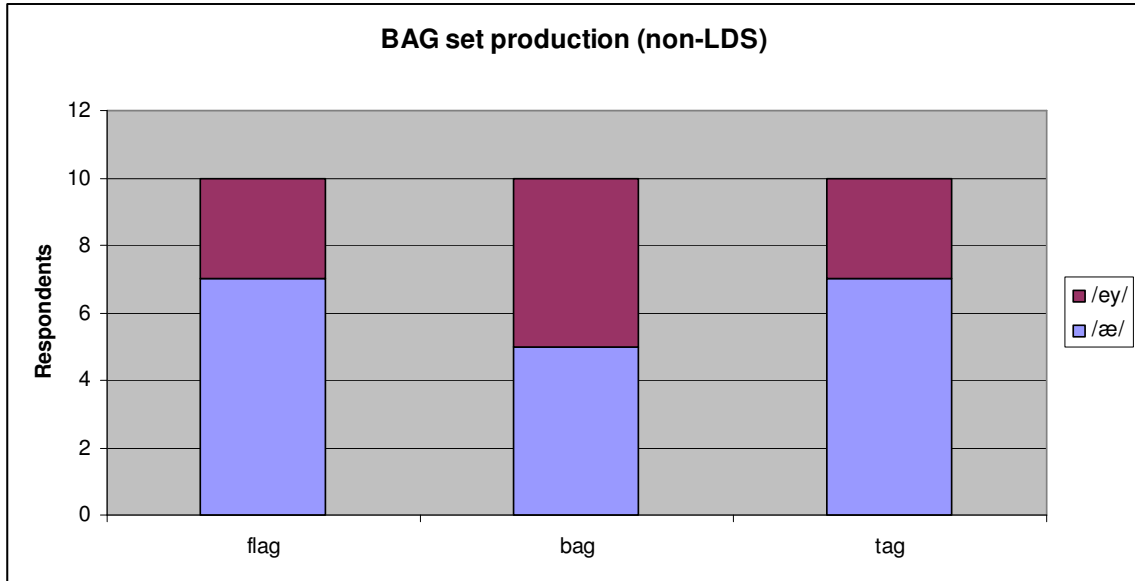
Table 4.16: The DUE set.

Strangely, it appears that the older LDS women were the most likely to diphthongize the /u/ in the DUE set. This pattern does not match what has been observed of LDS use of Canadian features, which has primarily been either uniform with non-LDS respondents or much less frequent. It should be noted that there were a number of females in the oldest LDS group that were particularly advanced in age. Perhaps the feature is mostly still viable only among the oldest respondents.

As mentioned in these descriptions, there appear to be some differences between LDS and non-LDS respondents regarding Canadian feature use. To determine whether this was the case, a two-way (group [LDS vs. non-LDS] by Canadian feature (the nine features discussed above)) ANOVA was performed on the data. The results of this analysis revealed a significant effect of group ($F(1,50) = 6.28, p < .01$), feature ($F(8,50) =$

16.74, $p < .001$), but no group by feature interaction ($F(1,8) = 1.93$, $p > .05$). In other words, the two groups differed in their use of all the features of Canadian English.

4.3.6. FURTHER STATISTICAL ANALYSIS. In order to determine whether the other social factors examined in this study also played a role in determining the use of Canadian features, a series of multiple regression analyses were run on the data with age, gender, educational background, and religious affiliation as predictor variables and the number of Canadian features respondents used as dependent variables. These analyses revealed three important social factors for the Canadian patterns: gender for the STONE set, age for the SORRY set, and religion for the BAG set (all F 's > 4.94 , $p < .03$). BAG was not originally suspected to be likely to reveal a religious alteration, but it appears much more likely for non-LDS speakers to use this vowel than LDS speakers, which is in line with the idea that the LDS community may not have assumed all of the speech patterns of their neighbors, possibly in that the larger social network encompassing it has historically only had a few outbound contacts.



Figs. 4.17 and 4.18: A comparison of the BAG set between LDS and non-LDS respondents.

As illustrated in the above graphs (being used as examples), age in general was considerably more important than any other factor studied. An explanation can be given that resolves this, if only a little: older non-LDS respondents were difficult to find. Age in general is pitting the wealth of older LDS respondents against the paucity of older non-

LDS respondents. In this case, this factor is not essential to the problem—it appears that “sorry” and “process” are simply being produced less and less frequently with the /o/ sound.

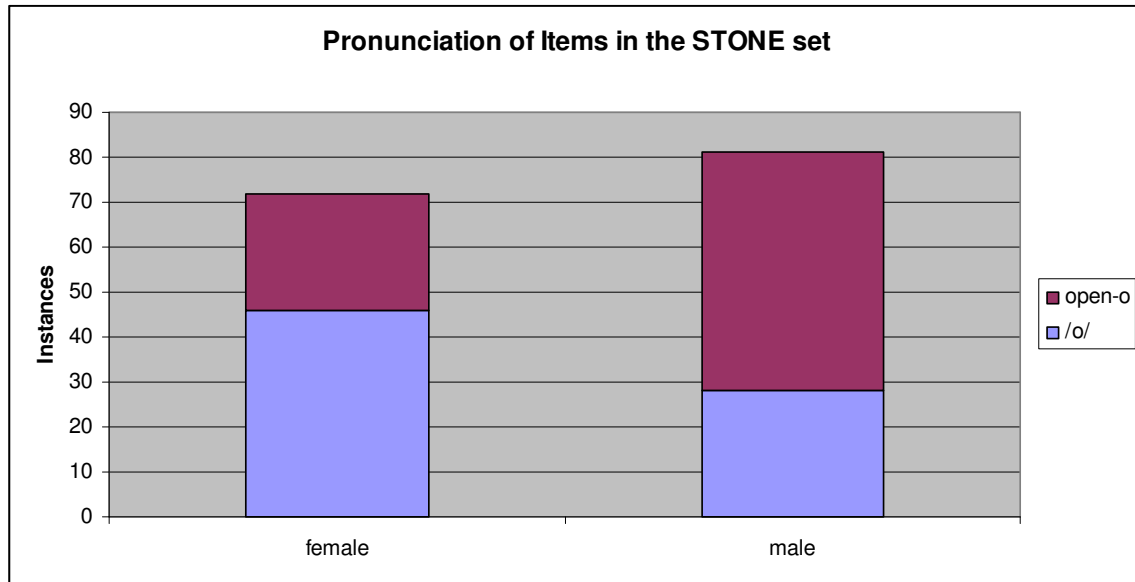


Fig. 4.19: The STONE set by gender.

The STONE set was indicative of many other trends of Canadian feature use; the females used more of them than the males. This may indicate that the Canadian features are prestigious, as in Labov’s (1994) paradigm of “change from above”—that which causes change to a more prestigious dialect is often initiated by women.

4.4. ANECDOTAL DATA. A number of older respondents (mostly female) mentioned a “Mormon drawl” as noted by other Canadians—one even mentioned an attempt at speech language pathology performed (whether officially or unofficially) while the subject was at University of Edmonton. The characteristics of this “drawl” could not be fully explained. Further, as mentioned previously, respondents acquainted with a peer from

Eastern Idaho mentioned his pre-lateral laxing as a distinguishing characteristic (also mentioned was the glottalization of pre-nasal /t/, a characteristic already common in the area).

The sociological implications (both general and specific to language change) will be discussed in Chapter 5.

CHAPTER 5: CONCLUSION

The previous chapter showed data intended to examine the existence and magnitude of the influence of Utah English on the English of Southern Alberta, and some of that data appeared to show trends that indicated at least the existence of said influence. Other data showed the mitigation of Canadian features among the LDS in the area. The results are discussed below, followed by an exposition of the relevance of this study, the limitations of the study, and suggestions for further work.

5.1. EVALUATION OF RESULTS. There seem to be three important factors that influence the speech patterns of the area: age, gender, and religion. Age appears to pattern such that older speakers are more prone to use “non-standard” patterns of speech (remembering that General Canadian is the pattern here), while the younger respondents are more in line with the General Canadian paradigm. Gender here patterns in a less predictable way, with women leading in “to Canadian” changes like /ey/ in *bag* and in “from Utah” dialect maintenance like *cord-card*. Women are well known for leading out in social change from above, and men in change from below (Milroy, 1980:113), so given the females’ tendency to lead in some changes and maintain in some others makes this a sort of a hybrid phenomenon in which some Canadian features are resisted by the LDS community, and some are embraced (the DUE set, for example, was used by LDS respondents more than the non-LDS counterparts. Religion appears to divide the group in two parts—the LDS group which has one Utah feature and little Canadian features, and the non-LDS group which does not have any Utah features, but many Canadian ones.

(Note: “religion” as it appears here is clearly a representation of the function of the religious social network, not as an independent function of affiliation or faith on speech.) Young respondents in the LDS group are still accommodating to the General Canadian paradigm, but in some features less frequently than older generations.

A number of the changes found seem to show the convergence of Utah and Canadian patterns, and how each has been and is being affected by the LDS community in the area and the influence of General Canadian at large. At the younger end of the group, it appears that vectors for change are moving toward a pattern that includes Canadian Raising in a specific environment (preceding voiceless obstruents) and open-o in the STONE set, but that does not include the production of the /o/ in the SORRY set, and infrequently produces /ey/ in the BAG set. Arguments could easily be made for this trend being called “standardization”, but the literature tends to posit /o/ in “sorry” and /ey/ in “bag” as standard. It appears, though that this standard may be a hybrid of US and Canadian features, in which proximity to the border and historical/religious influence should be disentangled as motivations for the changes.

Further, it appears that some of the changes that are occurring in the region may be cancelled out in further sociolinguistic trends by contact with Calgary and Edmonton, which, if the general Canadian trend continues in the manner associated with it, may reintroduce features that existed previous to immigration back into Cardston speech, and in some cases, may assimilate to General Canadian in ways which have not already been done in the area. For an example of the former, “sorry” seems to be decreasingly pronounced with /o/, which runs counter to that which is observed as General Canadian (Boberg, 2008), unless some trends moving to the contrary have not been observed. For

an example of the latter, “bag” appears to be pronounced with /æ/ among all ages in the LDS category, but the General Canadian pronunciation is /ey/. If the effects of commuting and contact as shown in Bowie (2001) have a similar effect here, we may see the end of the /æ/ pronunciation in a number of years, much as Canadian raising is widely produced by the younger respondents, but not so with the older ones.

It does appear that at least one Utah-based pattern is still in place here among the older population—that of *cord-card*. It is dying out, and, again referring to Bowie (2001), contact between age groups in the speech community could end the cord-card merger even faster than it would normally dissipate, as older speakers accommodate to younger ones. Newer Utah features (especially pre-lateral laxing) have not picked up here, indicating that any Utah-feature maintenance is more historical than contemporary, and that contact with Utah and Idaho have not left any sort of Utah-based prestige dialect among English speakers in Cardston, despite the religious connection.

In fact, the prestige dialect is something of a mystery—it appears that younger speakers are approaching a combination of features that does not match the non-LDS Cardston speakers, and are not approaching the general Canadian patterns, nor are they approaching a purely American dialect. Their prestige (or at least the pattern that the younger respondents appear to approach) is something of a conglomeration of the two—Raising is maintained, and the STONE set is still pronounced with /ɔ/, but the BAG set is not pronounced with /ey/. Utah features are dying out overall, but are particularly sparse among the younger generation.

The question of actuation is begged—what caused these Utah features (most interestingly, *cord-card*) to last for this long, and then dissipate? It appears that the factor

of religion, in this case, is the same as that of social networks (as such, networks appear to be the most effective method of describing the situation)—especially in this case which places the religious community of the LDS respondents in isolation from the rest of the Canadian speech community at least by distance (which, according to anecdotal data from Meechan, is complemented by some social distance as well). It appears that the explanation behind the maintenance is clear—the social group of LDS English speakers did not include enough general Canadian English speakers to effect the change until socioeconomic factors made subsistence farming and other small community occupations were insufficient to maintain the population base, requiring some commuting to Lethbridge and franchising for grocery and other needs, causing a widening in the social base of the Cardston group.

The actuation of the change seems to be centered on some change that occurred in a time period that would primarily affect respondents in their mid- and late-forties, as the “Laura” data tends to shift for people of that age range. I suspect, despite my inability to prove, that the move from an agricultural to a service-based economy occurred in the 1940’s or 50’s, yielding a rising generation that associated more with the Canadian English speaking population of Alberta, which began the changes in the rising generation. This explanation may be clearer if it is remembered that Bowie (2003) found *cord-card* in speech of people that were alive in a time period very close to the Card party emigration.

Of the factors discussed in the review of sociolinguistic literature in Chapter 2, it appears that region of origin is essential—if origin can well be associated with a historical origin rather than an immediate, personal one. The historical origin of the LDS

respondents appears to affect them immensely in keeping certain factors prominent in their language. Social class is probably not a factor, though all of the socioeconomic upper class respondents were LDS. The prestige of Utah English could not entirely be determined, as many were aware that their “Mormon drawl” was not prestigious in Alberta, but at least one Utah feature was preserved, and anecdotal evidence implies solidarity with the LDS dialectal community. Ethnicity is certainly not important—all respondents were ethnically similar.

Some of the mechanisms for change discussed in that chapter may also be relevant here. The Gravity Model (Trudgill, 1974) specifically relates in that Cardston’s small size in relation to Calgary and its proximity to Lethbridge, both of which presumably produce General Canadian English, is the draw that is bringing the Cardston patterns closer to GC patterns. Ethan’s Experience (2002), in which a child’s language normalizes independent of the parents’ patterns, does not seem to have an effect here—the social group using Utah features is large enough to where the features are the norm, and other than one non-LDS use of *cord-card*, there are no significant indicators that the Experience affected non-LDS children to normalize to the LDS standard.

Most relevant is koineization (Kerswill and Williams 2000): the creation of a new, intermediate dialect from two or more converging, different dialects. It appears that Canadian features and Utah features are not mutually exclusive at any point, though less Canadian features seem to be used by those who use more Utah features. Nonetheless, it appears that a dialect characterized by the use of both feature sets is in place. It may be more of a transitional koine, however, as use of Utah features is on the decline while Canadian features are increasing.

5.2. LIMITATIONS OF THE CURRENT STUDY. The primary weakness of the study was the paucity of non-LDS respondents. There were still enough to perform a stepwise regression, but the inequality in respondent pool size does little for the credibility of what are otherwise easily recognizable trends. In essence, the effects of this phenomenon makes of the non-LDS respondents a category the size of any of the educational categories—another segment of the population to compare the average to, rather than a full-blown half of the respondent set.

Another limitation is that of elicited item choice. These items are a good breadth of both Canadian and Utah features, but others can be added, and the system can be refined. This does not mean that the set is disappointing or insufficient, just that it can be improved upon—a number of the raising questions can be removed or replaced, and more cord-card related questions can be added.

The method of interview can also be improved upon. Had I the time to engage in lengthy open interviews, more information would have come regarding more features, including ones that were not predicted. Unfortunately, time was too much a factor.

5.3 SUMMARY. Religion as a sociolinguistic factor has been studied in the context of LDS versus non-LDS speech in Cardston, Alberta, Canada, an area settled by LDS immigrants from Utah. The study compared responses from fifty-one informants in the area, LDS and non-LDS from varying ages, genders and educational backgrounds in elicitation of words with vowels affected by Canadian and Utah patterns. The LDS respondents produced one sample of the *cord-card* merger, a Utah pattern, and generally

used the Canadian features much less than non-LDS respondents. The Utah pattern in question is on the decline, but the Canadian do not show an overarching trend or change in their infrequency of use.

5.4 CONCLUSION. It appears that Utah English has affected the English in Southern Alberta—features that exist in Utah varieties but not in General Canadian English exist in the Southern Alberta, significantly so in the LDS substrate of the populace. Among LDS speakers, there appears to be a widespread, but not uniform, paucity in General Canadian feature use. Indications are that religious preference is a factor in dialect change and maintenance in the region.

Further, it appears that the “Mormon language” (Meechan, 1998, pg 53) of the area is leveling to a degree with language in the area. Though the LDS community uses Canadian features differently (usually less frequently) than their non-LDS counterparts, it may be that the result is somewhere between, yielding either a new dialect between the two existing source dialects, or reflecting a possible pre-existing subdialect already at work in Southern Alberta that is a reflection of the area’s position between the US West and General Canadian areas. It seems certain that the LDS speech community continues to maintain a distinct identity.

5.5 FUTURE WORK. The difficulty of disentangling social networks and religious preferences have been made transparent by this study’s findings—it would be useful to study social groups with members of different religious groups to see if religious identification continues to affect language: again, the problem of disentanglement arises, though, with other factors. For example, if a study were conducted that included

Catholics, Protestants, and Jews in New York City, the issue arises of ethnicity. More Catholics in New York will probably have Irish, Italian, or Latin American ancestry, whereas people of the Jewish faith are more likely to have Slavic or German ancestry, and this genealogical fact may confound the issue of religion.

Further, Mormon studies in linguistics have been confined to the study of Utah English for the most part—this study was performed partially in hopes to further Mormon studies in the linguistic sphere. There remain several more studies that could be of interest. The Spanish of LDS Spanish/English bilinguals in Colonia Juarez, Mexico could be studied to see Utah English influence (as well as their English). The Singaporean English of LDS speakers in Singapore might well yield interesting results, and this would be purely based on contact with Utah English speakers, with no historical/comparative concerns to be addressed. A diachronic study of Utah English itself and its changes over the last 50 years, I believe, will result in an understanding that, in some essential ways, Utah is also leveling with the U.S. West.

Historical-comparative dialectology has little representation in the literature, and a number of things could be done in nearly every language to study the effects of one dialect on another in ways that do not involve a completed leveling phenomenon. Historical factors are certainly essential in, say, the structure of the phonological inventory in New York City English. Discussion of diachronic dialectology would be useful to fully understanding language history, as well as being beneficial for language planning.

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APPENDIX A: SURVEY QUESTIONS

What do you call frozen water? [ice]

When no one else is around, you are all _____. [alone]

What building does a farmer keep his animals in? [barn]

What do you call the kind of clothes children wear when they're sleeping? [pajamas]

If you don't pass you _____. [fail]

The back part of your foot is your: [heel]

A rose is a type of: [flower]

What do you call the bones in your head? [skull]

This is a wax writing implement usually used in drawing or coloring: [crayon]

When the deadline has passed for returning a library book, it is...? [due or overdue]

What's another word for prison? [jail]

What do you call the place you go swimming in in the back yard? [pool]

Someone who speaks untruths is called a: [liar]

What's the opposite of many? [few]

What's the opposite of dim? [bright]

What do you call the stuff that looks like a black rock and gets burned by power plants to create electricity? [coal]

This is a sport in which the participants use swords: [fencing]

When you get a parking ticket, you have to pay a: [fine]

What's another name for table tennis? [pingpong] "ing"

What's the opposite of weakness? [strength]

This is a person that wears white face paint and entertains children: [clown]

What's the opposite of "push"? [pull]

What do you call the moisture that collects on grass at night? [dew]

A building that people live in is called a what? [house]

This pumps blood throughout your body: [heart]

This is a female bull: [cow]

This is another word for a rock: [stone]

What would you use to fasten a cloth diaper with? [pin]

What's the name of the liquid you put in an engine to keep it running smoothly? [oil]

What do you call the piece of clothing that a man might wear under his collar and knotted around his neck? [tie]

What do you call a piece of cloth used to represent a country? [flag]

This is what postal workers deliver: [mail]

What do you call a writing utensil you have to sharpen? [pencil]

This is another word for "to begin" [start]

This is the word you use to apologize: [sorry]

Complete: Filing my taxes this year was a long and difficult _____. [process]
What do you say happened on the day of your birth—you were... [born]
A movie that isn't a comedy is called a what? [drama]
When two countries engage in armed conflict, it's called _____. [war]
What's the day after Monday? [Tuesday] {works for "tue" and vowel in "day" }

This is the part of a banana you don't eat: [peel]
What's the name of that cushion you rest your head on when you sleep? [pillow]
This is a white liquid drink extracted from cows: [milk]
What is the opposite of "in"? [out]
Ice that falls as precipitation is called what? [hail]

Today I fall down. Yesterday I _____ down. [fell]
What's a male cow called? [bull]
This is a name for any Italian dish made with noodles: [pasta]
What's the opposite of "empty"? [full]
The people at the grocery store put your groceries into a _____. [bag]

If you went as far north as you could possibly go, you'd be at the North... [pole]
What's the opposite of lost? [found]
What's the name of the dish you eat soup out of? [bowl]
This is a playground game where people run away from whoever is "it": [tag]
What do you call the place a child goes to learn things? [school]

This is a common surname that means "son of John" [Johnson]
What would you use to sign a check with? [pen]
The shortest distance between two points is a straight... [line]
You use a match to start a _____. [fire]
What's the word for "to operate a car"? [drive]

A skyscraper is a type of what? [building]
This is the opposite of low: [high]
What do you call the rubber things that go on car wheels? [tires]
In a business transaction, there's a seller and a: [buyer]
What is the name for a device used to communicate over long distances? [phone]

What's the name of the headdress a king wears? [crown]
This is a very common form of martial arts: [karate]
This is a white powder made of ground wheat? [flour]
What is the name of the First Lady of the U.S.? [Laura]
Las Vegas is a city in what U.S. state? [Nevada]

The ancient Romans spoke what language? [Latin]
If you are not for something you are? [against]
If you are not a child, you are an _____? [adult]