

**CROSSROADS AT THE LINGUISTIC MARKET: CANADIAN RAISING
AND POST-VOCALIC-R ON MOUNT DESERT ISLAND**

By © M.J. Antiqua-Parlee

A Thesis submitted

to the School of Graduate Studies in partial fulfillment
of the requirements for the degree of

Master of Arts in Linguistics

Department of Linguistics, Faculty of Arts

Project Advisor: Dr. Gerard Van Herk

Memorial University of Newfoundland

September 2016

St. John's Newfoundland and Labrador

Abstract

Local identity practices are not as straight-forward as originally predicted (Labov 1972a, 1963). In this thesis, I build on previous work on local identity practices (e.g. Blake and Josey 2003), Josey (2004), Wolfram (1997) in an investigation of local feature maintenance and local identity practice on Mount Desert Island, a tourist-dependent community in Eastern New England.

Based on analysis of interviews with 12 native speakers, I find that a local feature, the dropping of post-vocalic-R is moribund in the community. The r-less variant is maintained among older speakers. A gender and age pattern with a capital pattern (Bourdieu 1972, 1986, 1991) was found.

I also examine the community's use of Canadian Raising (Chambers 1973). I find that /aj/ and /aw/raising are introduced to the community with a great range of social variation as found in other communities in the northern US where raising is observed (e.g. Vance 1987, Dailey-O'Cain 1997).

Table of Contents

Title Page	1
Abstract	2
Table of Contents	3
List of Tables	5
List of Figures	6
List of Appendices	7
List of Abbreviations and Symbols	8
Acknowledgements	9
 Chapter 1 Introduction	 10
1.1. Research Questions and Hypotheses	12
1.2. Thesis Structure	15
 Chapter 2 Background Review	 16
2.1. Variationist Sociolinguistics	17
2.2. Social Networks Theory	17
2.3. Local Identity and Sociolinguistic Practices:	
Positive Identity Practices	18
2.3.1. Diphthong Centralization on Martha's Vineyard	18
2.3.2. Other Communities: United States	20
2.3.3. Other Communities: Canada	21
2.4. Negative Identity Practices	21
2.5. Linguistic Marketplace and Linguistic Capital	23
2.6. Dialect Contact	26
2.6.1. Transmission and Diffusion	26
2.6.2. Mainland Canadian English-General American English	27
2.7. Conclusion	29
 Chapter 3 Study Design	 30
3.1. Mount Desert Island: The Speech Community	31
3.1.1. Eastern New England English: The Local Variety	32
3.1.2. Features of Eastern New England English	34
3.2. Locating and Entering the Speech Community	35
3.3. Recruitment	37
3.4. Participant-Observer Methodology	38
3.5. MDI Corpus	40
3.6. Sociolinguistic Interviews	44
3.6.1. Questionnaires	45
3.6.2. Production Tasks	46
3.6.3. Interview Techniques	47

3.7. Ethical Considerations	48
3.8. Dependent Variables: Linguistic	49
3.8.1. Dependent Variables I: PVR	49
3.8.2. Dependent Variables II: /aj/ and /aw/	52
3.9. Token Extraction and Coding	55
3.9.1. Phonological Factors	56
3.9.2. Demographic Factors	59
3.9.3. Social Network	60
3.9.4. Capital Market Score	61
3.9.5. Speech Style	63
3.10. Multivariate Analytical Tools	63
3.11. Conclusion	66
Chapter 4 Results	66
4.1. PVR	67
4.2. Acoustic Analysis of the /aj/ and /aw/ diphthongs	75
4.3. Conclusion	81
Chapter 5 Discussion	82
5.1. Grammar External Factors Operational On Linguistic Change on MDI	83
5.1.1. Speaker Gender and Speaker Age	83
5.1.2. Capital Score (Source of Livelihood) and social network	85
5.1.3. Speaker's Age	86
5.1.4. Speech Style (Labov 1972b)	87
5.2. Conclusion	88
Chapter 6 Conclusion	89
Chapter 7 References	94
Chapter 8 Appendices	100

List of Tables

Chapter 3

3.1. The Mount Desert Island Corpus	41
3.2. A Demographic Description of the MDI Corpus Speakers	42
3.3. Levels Used in Analysis Of PVR	52
3.4. Variables and Variants Included For Extraction Procedures	56
3.5. Tokens Extracted from Each Informant N=1,728	57
3.6. Phonological Factors and Levels: PVR	58
3.7. Phonological Factors and Levels: /aj/ and /aw/	59
3.8. Demographic Factor Groups and Levels	60
3.9. Factor Groups and Levels: Social Network Type	60
3.10. Capital Score Factor Groups and Levels	63
3.11. Levels for Speech Style Factor Group	63
3.12. Cross-Tabulation Social Networks and Market	64

Chapter 4

4.1. Tokens extracted for analysis: Mount Desert Island Corpus	67
4.2. Initial Logistic Analyses to the Choice of R-less variants on MDI	70
4.3. Age/Gender Run, Capital Excluded: Factors Selected as Significant PVR on MDI	72
4.4. Capital Score Run (Age/Gender Excluded): Factors Selected As Significant to the Choice of PVR Variants on MDI	74
4.5. Phonetic Variants of Vowel Height of /aj/	76
4.6. Phonetic Variants of Vowel Height of /aw/	78

List of Figures

<i>Chapter 1</i>	
1.1 Map of Maine (maps.google.ca)	12
<i>Chapter 2</i>	
2.1 Canadian Raising (Chambers 1973)	27
<i>Chapter 3</i>	
3.1 Mount Desert Island Community (barharborinfo.com)	32
3.2 Map of Eastern New England Dialect Region; Adapted (Nagy and Roberts 2004)	33
3.3. PVR Rule-Based Operation	50
<i>Chapter 4</i>	
4.1. Distribution of post-vocalic-R by informant	69
4.2. Scatterplot: Height of the /aj/ nucleus	80
4.3. Scatterplot: Height of the /aw/ nucleus	80

List of Appendices

A. Informed Consent Forms	100
A1. Two-Party Informed Consent Form	100
A2. Three-Party Informed Consent Form	105
A3. Confidentiality Waiver and Affidavit	111
B. Interview Materials	112
B1. Demographics Questionnaire	112
B2. Social Networks and Linguistic Market Questionnaire	112
B3. Word List	113
B4. Reading Passage	114
C. Recruitment Materials	117
C1. Poster	117
C2. E-Mail Script	118
C3. Social Media Script	119
C4. Community Service Credit – Mount Desert Island High School	119
D. ICEHR Approval and Correspondence	120
D1. Initial Approval	120
D2. Amendments to Terms	121

Abbreviations and Symbols

Abbreviations

CR – Canadian Raising; A feature attested to be in use by speakers of Canadian English (Chambers 1973). Speakers variably raise the first (vowel) element of the diphthongs /aj/ and /aw/.

ENEE – Eastern New England English; A variety of English spoken in Maine, eastern Massachusetts, New Hampshire and Rhode Island (Nagy and Roberts 2004).

F1 – First formant; An acoustic measurement correlating with vowel height.

IPA – International Phonetic Alphabet; Symbols in this system are used to represent the sound system of human language.

MCE – Mainland Canadian English; A variety of English spoken widely across Canada, except for the Maritimes Boberg (2008).

MDI – Mount Desert Island; The speech community under investigation for this project on the southern coast of Maine.

PVR – Post-Vocalic-R; A feature attested in ENNE where the segment /ɹ/ is variably dropped following a vowel (e.g. "car", "barn" [ka:], [ba:n]).

Symbols

/a/; The first element of the /aj/ and /aw/ diphthongs studied in this project, which in “standard” production has a low front quality.

// - slanted brackets; When these enclose an IPA symbol the sound represents a *phoneme* of the attested sound which is not a 1:1 association.

[] - square brackets; When these enclose an IPA symbol the sound represents a *phone* of the attested sound, which by contrast to a phoneme is a 1:1 association of the represented sound.

/ɹ/; A liquid coronal consonant, this is the target of the PVR feature when in a coda. Final consonant in “car”, “pour”, “barn.”

Acknowledgements

This thesis project is based on research conducted on the local identity practices of speakers in the coastal New England community of Martha's Vineyard. I am grateful to a number of friends and colleagues who offered their encouragement and support in persevering through and the completion of this project. In particular, I would like to extend thanks to Drs. Johnson, D'Arcy, VanHerk and DeDecker.

I am grateful to certain acquaintances and friends in the Mount Desert Island community who volunteered their time to participate in sociolinguistic interviews. Without their invaluable participation, this project would not have been possible. I also offer my gratitude and thanks to my advisor for his support. My thanks to the Canadian Linguistic Association, Atlantic Provinces Linguistic Association and CVC Committee for offering the opportunity to share selected results of this project at their conferences. Finally, I would like to acknowledge the love and support of my extended family.

1. Introduction

This thesis project is a sociolinguistic study of phonological variation in a coastal Eastern New England community which is economically dependent on tourism. Mount Desert Island (henceforth MDI) is located off the southern coast of Maine (see Figure 1.1 below), and its residents rely economically on outsiders through summer visitation to the area. Previous work has investigated the use of language as a resource for residents of coastal communities to express a local identity (e.g. Labov 1963, Shilling-Estes and Wolfram 1995, 1999, Shilling-Estes (1999, Van Herk et al. 2009).

The outsider clearly plays a vital role in how members of these communities use both local language and new incoming features; (Inoue 2010, Callary 1975, Labov 2007, Allen 1989), Although the impact of outsiders on these communities is identified in previous work, (e.g. Labov 1963, 1972a), the role of outsiders on the practice of local identity has not been fully explored.

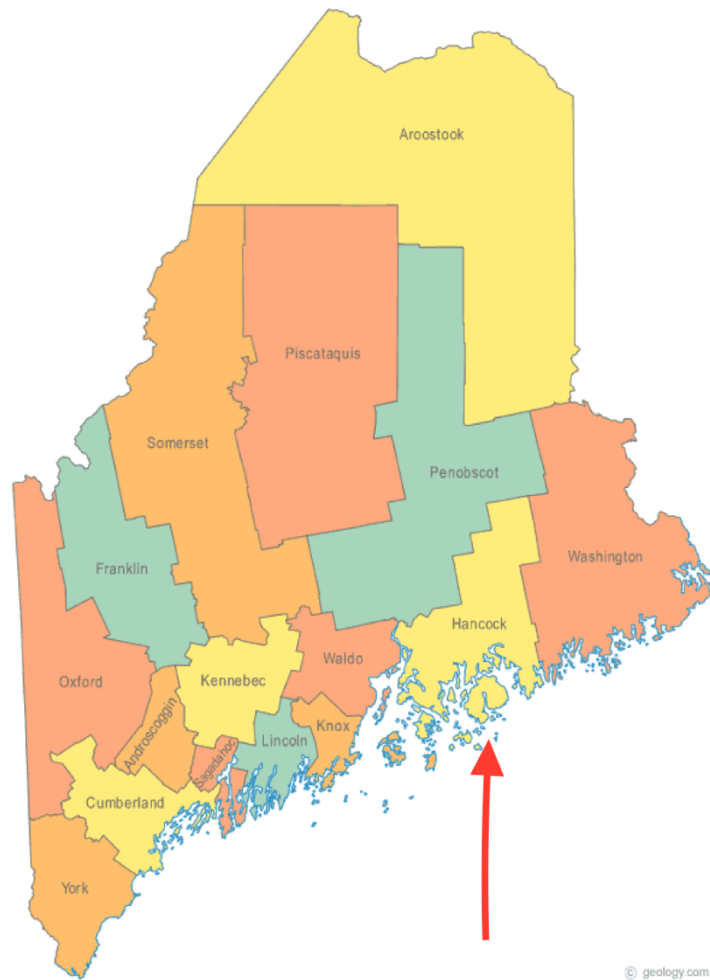
I attempt to rectify this problem in this study, offering findings using apparent time data (Labov 1972a, Bailey et al. 1993, Boberg 2000, Chambers 2002) concerning the use of the regionally identified feature post-vocalic-R dropping (Becker 2014, Stanford et al. 2012) by native speakers of MDI, as well as their use of a non-local contact feature introduced to the community by a marked outsider group (Canadians visiting the area on whom residents of MDI are socio-economically dependent). Linguistic features such as Canadian Raising

(Chambers 1973, might be introduced through diffusion and contact with these speakers (Labov 2007); another possibility is that they are phonological constituents of the local variety that carry similar phonological qualities to Canadian Raising, as Roberts (2007) finds in Vermont.

In this paper, I investigate both possibilities, using multivariate analysis of the vowel height of the /a/ nucleus of the /aj/ and /aw/ diphthongs to analyze patterns of use and to determine whether or not this pattern is indigenous or a result of contact. I also investigate the community's local identity practices through local language feature use through multivariate analysis of the regionally identified feature of post-vocalic-R drop (Irwin and Nagy 2007), comparing speaker's linguistic choices of local and non-local speech in terms on the linguistic market (Bourdieu 1972, 1986) in order to better identify the role of the outsider on these practices and language choices.

This project is an investigation of language choices for speakers and how a speaker negotiates a number of social forces, including social groups, market, local identity and contact through a multivariate analysis of two phonological variables.

Figure 1.1: Map of Maine: (maps.google.ca) Accessed 1/7/15



1.1 Research Questions and Hypotheses

In this section, I expand the premise of my thesis by developing research questions and related hypotheses. These questions explore local identity practices (Labov 1972a, Shilling-Estes and Wolfram 1995, 1999, Shilling-Estes 1999) and the influence and role of capital and the outsider on linguistic choices on members of the speech community. This requires a discussion of dialect

contact (Labov 2007) as a result of the features that are introduced to the community by outsiders.

- How do speakers living in the MDI community practice a local identity?

Language is found to be a rich resource for speakers in other communities (Labov 1972a, Shilling-Estes and Wolfram 1995, 1999, Wolfram 1997) in the practice of identifying with the local community. Patterns in the form of social variation are observed in the use of these local language features including gender, age and place (Josey 2004). Hypothesis: Local identity practice is achieved through the variable use of locally-identified regional features, with some degree of social variation as a result of differences in attitudes and social groups (Labov 1963, Josey 2004). Practice of a local identity through local language features, such as PVR, will exhibit social patterns revealing a social meaning behind local identity practice and its maintenance. In other communities, the use of local features is found to be in decline (e.g. Shilling-Estes 1997, Irwin and Nagy 2007), with maintenance of these features found only among specific social groups such as older men (e.g. Wolfram 1997) and women (Josey 2004). Therefore, use of the local r-less variant on MDI will be found in decline, and any use will only be found among certain social groups.

- Which speech features do residents of the MDI community use to practice a local identity? Hypothesis: Previous work on the Eastern New England region (e.g. Reid 2007, Nagy and Roberts 2004, Becker 2014, Stanford et. al 2012) observes

that certain phonological features are markers of regional identity. Certain pragmatic features may be in use as well. (Reid 2007, Becker 2014, Irwin and Nagy 2007, Stanford et al. 2012) argue that there are changes in progress in the region in the use of locally-identified PVR. The use of PVR is expected on MDI as a marker of local regional identity; however, it may be undergoing change, given its status elsewhere in the region (Irwin and Nagy 2007).

- How do speakers living in the community accommodate outsiders through language use? What is the role of the outsider in a community dependent on tourism (in terms of language choices)? Hypothesis: Given the proximity of the community to Canada and its speakers' economic reliance on Canadian tourists (see Chapter 3), I posit that MDI residents variably use non-local speech, such as Canadian features, to accommodate this outsider group as part of a favorable selection on the linguistic market (Bourdieu 1972, 1986, 1991).
- How do non-local speech features diffuse to such a community? Hypothesis: Following the insights of Labov (2007), it is clear that the diffusion of speech features from one speech community to another in cases of dialect contact results in a weakening of the original pattern; therefore, if Canadian Raising is observed on MDI the pattern will not be modeled on the Canadian pattern but will show phonological and social variance.
- What is the impact of linguistic marketplace and capital on the speaker's choices? Hypothesis: Living in a community dependent on an external source of capital

will affect how a speaker practices a local identity and therefore which source of capital a speaker depends on will impact how outsiders are treated and accommodated, as these speakers have different motivations due to their different relationships with outsiders (Bourdieu 1972, 1986, 1991, Josey 2004).

- What social constraints are operative on the use of PVR and Canadian Raising on Mount Desert Island? What interactions are involved? What social meanings do these features carry? Hypothesis: We might expect an age effect, whether due to a change in progress as reflected by the apparent time hypothesis or due to age-graded linguistic market effects (Sankoff and Laberge 1978). Whether the variation we find is stable or represents change, we might also expect a gender effect, given numerous studies in which women either lead change or prefer standard variants in stable situations (Labov 1972b).

1.2. Thesis Structure

In Chapter 2, I discuss the background literature on local identity practices in eastern seaboard communities in the United States and Canada, as well as other studies, and how they relate to local identity practices, accommodation of the outsider, dialect contact and language use for this project. In Chapter 3, I describe the study design and address ethical concerns of this project. In Chapter 4, I present the acoustic and impressionistic findings of this project. In Chapter 5, I discuss these results, followed by Chapter 6 in which I offer a conclusion.

2. Literature Review

In order to address research questions concerning the sociolinguistic practices of MDI residents it is necessary to acknowledge the sociolinguistic history of the community and previous work on language use in other, similar speech communities.

The structure of this chapter is as follows: First, I discuss the framework for this thesis project: variationist sociolinguistics (Labov 1972a) mixed with insights from social networks theory (Milroy and Milroy 1978, Milroy 1987, 2000). Second, I review work which observes language as a resource for speakers to practice a local identity (e.g. Labov 1963, Wolfram 1997, Shilling-Estes and Wolfram 1999, 1995, 1997) on the eastern seaboard of the U.S. and Canada. Third, I discuss the findings of a number of studies which show language as a resource for negative identity practices (e.g. Bucholz 1999, Michnowicz 2012), where members of a group or speech community use language to reject an unwanted identity. Fourth, I discuss the impact of linguistic market and capital on linguistic choices for speakers (Bourdieu 1972, 1986, 1991). I conclude the literature review with a discussion of dialect contact, focusing on contact between speakers of Canadian English and American English to provide a context for the current study.

2.1. Variationist Sociolinguistics

A linchpin of sociolinguistic study is the examination of how linguistic variables are distributed across social groups (Labov 1972b, 1972a, Bailey et al. 1993, Boberg 2000, Chambers 2002) in order to explain the social constraints on language use in speech communities. Previous work finds that a speaker's gender (Labov 1972b, Peng 1982), age (Tagliamonte and D'Arcy 2009, Labov (1972a), place, education and other social factors impact variation in the use of linguistic features. Labov (1972b) argues that women universally lead changes in progress, while men use the non-standard variant more when variation is stable or the variable is "salient" (above the radar) enough to be perceived. See Peng (1982), Bucholtz (1999) for different opinions on variation by gender in speech communities.

2.2. Social Networks Theory

Social networks theory (Milroy 1978, 2000, Milroy and Milroy 1987) describes how a person's connections to others can impact linguistic changes. This innovation provides insight into how local speech is maintained when speakers are faced with pressures to standardize.

A speaker's social network's structure is a vital factor in the MDI community for the consideration of linguistic changes, given the community's economic dependence on outsiders and numerous external influences on the local variety of English.

Social networks are measured in Milroy (2000) by two dimensions of an anchor's (speaker's) ties with others in a community: number of ties (i.e. number of relationships with others in the community) and the strength of said ties (i.e. investment in those relationships). A person with a *loose* network can be described as one with many ties, typically few of those ties can be described as being strong. In contrast a person with a *dense* network can be described as one with few ties, typically most of the ties can be described as strong. An analysis of these measurements allows a description of the speaker's social network, as described in Chapter 3.

2.3. Local Identity and Sociolinguistic Practices: Positive Identity Practices

To discuss local identity practices and dialect contact on MDI, it is necessary to consider previous work on these practices in other rural and coastal communities on the eastern seaboard of the U.S. and Canada, such as those of the residents of Martha's Vineyard (Labov 1972a), Ocracoke and Smith Islands (Shilling-Estes and Wolfram 1997, 1999, Wolfram 1999) and Newfoundland (Childs et al. 2010).

2.3.1. Diphthong Centralization on Martha's Vineyard

Labov's (1963, 1972a) ground-breaking studies of local identity practices impacted the field with his investigation of the production of the phonetic variants of /aj/ and /aw/ in the coastal Eastern New England community of Martha's Vineyard. He correlates the use of centralization with social factors

including a speaker's sense of island identity, aversion to tourists (outsiders), occupation, age, and ethnicity, as well as a number of phonological considerations. The highest incidence of centralization occurs among fishermen on the island (Labov 1972a:29). Speakers who express a desire to remain on the island use more of the centralized variant than any other group. Furthermore, the island economy is no longer sustained by traditional sources (e.g. fishery, agriculture) and islanders feel pressure to resist a shift to rely economically on outsiders (Labov 1972a:27). Labov argues that centralization is imbued with two meanings in accordance with these patterns: the first marks the islander as a member of the Martha's Vineyard community and the second rejects the outsider. He observes that the youngest speakers use the least centralization in their speech as a result of not having felt the threat to island identity and having to leave the island to make a living.

Josey (2004) follows up on Labov's (1972a) study on Martha's Vineyard, using apparent-time and real-time data to compare the sociolinguistic practices of the speech community forty years later with those in 1972. She finds a shift has occurred in one of the meanings of the centralized variants. The variants are still in use today to maintain a local identity; however, across forty years the negative evaluation of outsiders associated with the variants has not been maintained. She argues that this is due to tacit acceptance of the socio-economic

shift. Residents of the community have lost the need to engage in linguistic resistance against the outsider group.

2.3.2. Other Communities: United States

Other studies of local identity in communities in the coastal United States find language to be a resource for community members, though the use of these local language features are in decline, as with the variable backing and raising of /aj/ on Ocracoke Island (produced as /oj/) (Wolfram (1997).

Shilling-Estes and Wolfram (1995, 1999) and Wolfram (1997) investigate variant productions of the first element of the /aj/ diphthong, variably produced as /aj/ or /oj/, on Ocracoke Island off the coast of North Carolina. They find that the non-standard /oj/ variant is used as a marker of local identity for older men in the community, although marginalized groups do not participate. The speech patterns of Ocracoke Island are compared with those of Smith Island (Shilling-Estes and Wolfram 1995, 1999). Smith Island residents have limited contact with outsiders and have an internally dependent economy. People are slowly emigrating away from the island. This “concentrated” community is in contrast with Ocracoke, whose speakers have more contact with outsiders and a higher dependence on summer visitors and are not subject to the same degree of out-migration. Cross-generational comparisons of the two communities find that the use of /oj/ on Smith Island is in remission, while speakers maintain use of the feature on Ocracoke. Shilling-Estes and Wolfram (1999) argue that these

findings indicate these non-standard speech features are at greater risk of death in communities that are progressively more mobile in one direction (such as Smith Island) as its younger speakers move away.

2.3.3. Other Communities: Canada

The use of local language features to practice a local identity is also found in coastal Canada. For example, in the province of Newfoundland, Childs et al. (2010) study the stopping of theta and eth (e.g. [tri] for “three”) in a number of rural communities in Newfoundland, and examine its use as a local identity marker. Three studies using a variety of sampling methods are conducted; the only comparable result between the studies demonstrates that Newfoundlanders make use of an external referee (reference model), an idealized authentic Newfoundlander, in style shifting, following Bell's (1984) model. Childs et al. (2010) argue that the use of this referee source by residents of Newfoundland is part of their practice of a local identity. The external reference for a local identity demonstrates the salience of these local speech features and the importance of maintaining a local identity through locally identified speech.

2.4. Negative Identity Practices

Language is not always used to index a positive orientation towards a given identity (Labov 1972a). Several studies find that speakers are capable of using linguistic features as a resource to reject an unwanted identity. As

previously noted, this practice is observed, as in the use of diphthong centralization on Martha's Vineyard to reject outsiders (Labov 1963, 1972a).

Nagy (2001) examines the local identity practices of speakers living in rural New Hampshire and Massachusetts through their lack of participation in vowel mergers associated with speakers living in eastern New England. These mergers include pre-rhotic vowels, such as that of MARY, MERRY and MARRY, as well as that of FATHER and BOTHER. She finds that speakers living in Boston favour the mergers, while speakers living in the rural areas surrounding Boston (eastern Massachusetts, New Hampshire) retain the phonological distinctions between these vowels. These rural speakers are practicing their rural identity through avoiding participation in an urban change, resisting an urban Boston identity through linguistic choice.

Bucholtz (1999) finds that girls identifying as "nerds" in a US high school express their nerd identity through a rejection of "cool" culture and language. She finds that when an envoy between the cool and nerd groups used "cool" linguistic features in her discourse, her argument was dismissed, even ridiculed by her friends identifying as "nerd girls" (i.e. "cool" speech was seen as something to be avoided).

Michnowicz (2012) finds that younger speakers living on the Yucatan peninsula are converging on regional Spanish forms (influenced from Mayan).

He finds that speakers living on the peninsula reject the urban standard language features in their reclamation of local language features.

In New Zealand, Meyerhoff and Niedzielski (2003) find that residents maintain local British identified phonology, resisting incoming American norms. These speakers maintain their local identity through the rejection of American linguistic influence.

At the intra-speaker level, Cutler (1999) finds that a white middle-class male participates in African American English feature use in order to identify with this social group, rejecting his “white middle-class” identity.

2.5. Linguistic Marketplace and Linguistic Capital

The concept of linguistic marketplace introduces a new perspective on speakers’ linguistic choices. Speakers’ social and economic capital, and their relationship between others in society with respect to market and capital, impacts their linguistic choices. Bourdieu (1972), (1986), (1991) find that speakers are responsive through linguistic choices to symbolic capital and relationships of power. This suggests that a speaker’s linguistic choices are influenced by their position in society, which is an output of these power relationships and how they perceive themselves to fit into the market (i.e. what their relationship is with others in the community and the effect capital has on linguistic choices).

Awareness of these positions and the positions themselves are especially important for speakers living in a community which depends heavily on

outsiders, as a result of the external socio-economic dependence on tourism.

Speakers living in such a community must evaluate their reliance on outsiders and whether or not and how they will benefit and make choices accordingly.

The output of the power relationships on the market and their ability to act on linguistic choices are stronger, as the community's economic reliance on tourism is an unavoidable issue (see Chapter 3).

Speakers living in a bilingual Hungarian community (Gal 1973) were found to favor German in situations of courtship while Hungarian was favored in more familiar interactions; demonstrating that speakers in the community were aware of the differences of power and rewards in the selection the two languages offered (Bourdieu 1991) and were capable of making selections between the languages accordingly.

Martha's Vineyard, as previously noted, also depends on an externally sourced economy from summer visitors. Josey (2004) argues that the linguistic market impacts linguistic choices for speakers in the Martha's Vineyard community today. Centralization has two established meanings (Labov 1972a): establishing local identity and rejecting outsiders. Josey (2004) argues that its use today shows that residents of the community have dropped this second meaning and no longer use centralization to reject outsiders, reflecting a tacit acceptance of the shift in the market (i.e. that Martha's Vineyard is now reliant on summer

visitors economically) but has retained the use of centralization in its expression of a local identity.

Residents of Maine have been found to demonstrate their awareness of the market value of their local language. Reid (2007) asserts that speakers of the local variety of New England English in Maine are self-described as having a “rustic old English way of speaking.” They are aware of the speech features associated with their dialect, and of its salience to non-locals. Residents of the Maine coast, Reid contends, exploit the beliefs of outsiders concerning local language intentionally. She argues that the enregistered image e.g. Johnstone (2011) of the Mainer perpetuates an image for outsiders of an unspoiled Maine coast and speakers living there who are using traditional unspoiled language features sourced from Britain; all for the benefit of the outsider. This image attracts outsiders (and their money) to the state.

Van Herk et al. (2009) demonstrate the impact of market on linguistic choices in Newfoundland following the cod moratorium which virtually ended the fishery as an economic resource for the community, forcing residents to pursue alternative economic means of support. This study finds that speakers in the community are adopting standard norms, reflecting a drive towards urbanization by islanders following an in-migration of outsiders as a result of the socio-economic shift.

These studies demonstrate that a speaker's position on the market and capital have a strong impact on a speaker's choices from anything from phonology to code chosen, showing that market is capable of affecting the choice between variants anywhere. In a community that depends on an externally-sourced economy, it is a possibility that speakers in such a community may allow market to play a stronger role in deciding which features they are willing to use.

2.6. Dialect Contact

In this section, I discuss dialect contact, the situation that arises when speakers of different varieties of a mutually intelligible language co-exist in close geographical and social proximity, such as the situation between speakers living in MDI and those living in Maritime Canada. When speakers of two varieties of the same language share borders and interact, an exchange of money, language, social attitudes and more is expected.

2.6.1. Transmission and Diffusion

The elucidation of the mechanisms behind the transmission and diffusion of linguistic features in contact situations has been of significant interest to the field of sociolinguistics. Labov (2007) argues that dialect contact results in *diffusion* across communities. This manifests as a weakening of the original linguistic pattern and a loss of structural cohesion of the linguistic constraints operating on the observed pattern observed in the use of the original variant (Boberg 2000, Dailey-O'Cain 1997, Inoue 2010, Callary 1975, Poplack 1993).

2.6.2. Mainland Canadian English-General American English

A phonological feature in wide-spread use by Canadian speakers is Raising (Chambers 1973, Boberg 2008) the raising of the first element of the /aj/ and /aw/ diphthongs. Given the social and geographical proximity between Canadian and American speakers (a majority of the population of Canada lives close to the American border), contact and linguistic diffusion between these speakers is expected. It is not surprising that Raising has been reported in the northern United States as early as the 1980s, e.g. Vance (1987). Reports of Raising in the northern United States (e.g. Boberg 2000), Allen 1989, Vance 1987, Dailey-O'Cain 1997, Roberts 2007) show phonological and social variation on the categorical pre-voiceless environment exclusive pattern originally reported in Canada (Chambers 1973), shown below in Figure 2.1. Roberts (2007) finds a local feature in use by residents of Vermont that is phonologically similar to Raising but is not a diffused feature from Canada.

Figure 2.1 Canadian Raising, Adapted from (Chambers (1973)

/aj/ → [ʌj]/ __[-voice] e.g. [kʌjt] "kite"

/aw/ → [ʊw]/ __[-voice] e.g. [abʊwt] "about"

Reports of Raising in the United States raise a clear question concerning the use of Raising on MDI: is Raising being diffused from Canada? How will the Canadian pattern be reproduced by speakers living on MDI?

I now narrow the scope of the discussion of contact between Mainland Canadian English to address the contact situation relevant to this study: contact between speakers living in the state of Maine and those living in the neighbouring provinces (Québec, New Brunswick and Nova Scotia). Previous work on contact between these speakers is limited to the two studies discussed below. These studies examine the use of lexical features (e.g. *sneaker* vs. *runner*) but do not examine phonological features, as I do in this study.

Miller (1989) and Burnett (2006) investigate the use of a number of lexical items in the border towns of Calais, Maine and St. Stephen, New Brunswick (a busy border crossing). They find that residents of St. Stephen favour Canadian norms at the expense of American norms. Unsurprisingly this is especially true among the younger speakers in the community. Residents of the US community of Calais resist Canadian norms, although the youth of the Maine border town do allow themselves the linguistic flexibility to be receptive to Canadian forms. Miller (1989) indicates that residents living further away from the border exercise more linguistic resistance to Canadian features, and this resistance increases the further one travels from the border. Dailey-O'Cain (1997) finds that speakers living in Ann Arbor are variably Raising although its use is subject to wide phonological and social variation.

Britain (1997) finds Raising-like patterns in England. These patterns could not have resulted from contact with Canada. The finding of raising-like patterns

in communities with varying levels of contact with Canada suggests that this thesis will not be able to determine whether a Raising pattern, if present, is definitely Canadian (as a result of a lack of prior research on Mount Desert Island English).

As a result of a dearth in the literature of previous work on the region and MDI, it will not be possible to assess whether or not any pattern is a diffusion from Canadian speakers. At most, this study can utilize phonological contexts and social patterns to identify if any patterns are Canadian-like. However, without real time comparison from previous work, it is not possible at this time to make a decision whether said patterns are being introduced from Canadian summer visitors or are patterns native to the local variety which are phonologically similar to the Canadian pattern (e.g. Roberts 2007).

2.7. Conclusion

In conclusion, a review of the literature suggests that we might expect linguistic consequences for the residents of the MDI community as a result of their frequent contact with speakers of Canadian English. Their choices may reflect market-driven impact based on the importance of these visitors to their community and the need to accommodate them, although said choices need to balance in some manner with practicing a local identity through language use.

3. Study Design

This chapter describes the study design for this project. Traditional sociolinguistic methods (Tagliamonte 2006, Labov 1972a) were used to construct a corpus of linguistic data. This data is the basis for multivariate analyses, described in detail below, which I use to examine the social patterns underlying the use on MDI of the phonological items under investigation.

The chapter is structured as follows. First, I discuss the MDI speech community. Second, I discuss my re-entry to the community as a native and my use of the participant-observation method. Third, I discuss the procedures used to build a linguistic corpus. Fourth, I describe the dependent and independent variables analyzed in this study. Fifth, I discuss the procedures I use to perform multivariate analyses of the data.

3.1. Mount Desert Island: The Speech Community

MDI is an island community located off the coast of southern Maine. It includes four towns on the island (Mount Desert, Bar Harbour, Tremont, Southwest Harbour) and the town directly on the mainland, Trenton.

Figure 3.1 below shows a detailed map of the MDI community. This map shows privately owned lands (in white) and those that are owned by the local national park authority (in green), Acadia National Park. This park is a significant part of the attraction for the summer visitation to the area. The region accommodates 2.5 million summer visitors annually (www.barharborinfo.com).

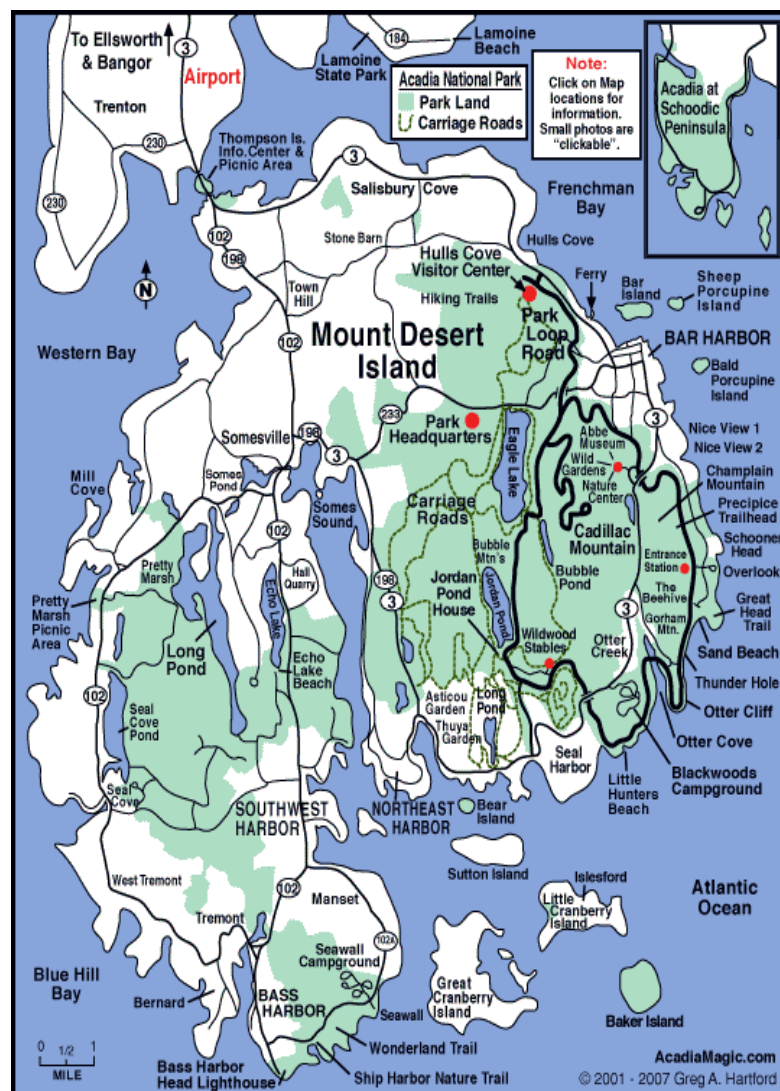
The fact that this region is capable of accommodating this number of visitors every year is staggering; its year-round population is only 10,000. (ten thousand). Tourism is central to the local economy. These visitors shop and stay in the area throughout the summer months. Local agencies find summer employment and housing for outsiders as well as local residents to staff the many shops and restaurants that are open only during the summer months. Residents of the four towns on the island have different attitudes toward the tourist industry, as the impact of the industry on each town is different. Bar Harbour has the most traffic (having more shops and park land), Mount Desert caters mostly to wealthy summer visitors with its marina for yachts and its mansions, while Tremont and Southwest Harbour are largely unaffected by the tourism industry.

Visitors to the island come from all over the world. Canadians (as a result of their proximity to the community) constitute a major portion of the 2.5 million visitors, estimated at 30-40% of the summer visitors to the region.¹ MDI is easily accessible to Canadians as MDI is in close geographical proximity to Maritime Canada. Many visitors come from elsewhere in Eastern New England and the United States. However, Canadians are an outsider group who use linguistic features which are marked as different from the local variety of English, such as Raising (Chambers 1973) and discourse tags at the end of sentences (Avis 1954).

¹ Estimation provided by Bar Harbor Chamber of Commerce (March 9th, 2016).

They are marked as outsiders next to those who visit from other regions of the United States.

Figure 3.1. Mount Desert Island Community (barharborinfo.com)



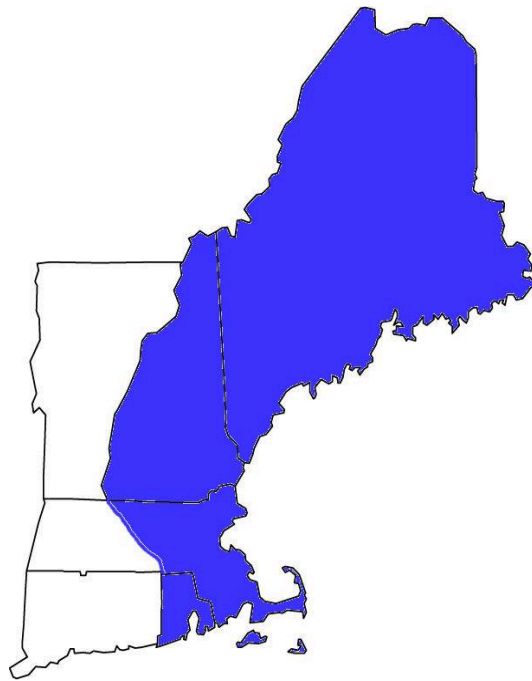
3.1.1. Eastern New England English: The Local Variety

In this sub-section I describe phonological features that are attested to be in use variably by speakers of the regional variety (Eastern New England English) and trends concerning the use of these features. I also describe

settlement patterns that have led to the predominant linguistic influences from Eastern New England on communities in coastal Maine.

Eastern New England English is spoken in a region of the United States that includes speakers living in Maine, New Hampshire, Rhode Island and the eastern half of Massachusetts. Figure 3.2 shows a map of New England with the dialect region shown in blue.

Figure 3.2 Map of Eastern New England Dialect Region Adapted (Nagy and Roberts 2004)



The Maine coast was settled by colonists from elsewhere in the eastern New England region, thus the linguistic features used in coastal Maine are similar to those of speakers in Eastern New England. These settlers were originally from southeast England (Nagy and Roberts 2004, Forbes 1944).

Following the persecution of Acadians in Canada, many francophone living in Nova Scotia and New Brunswick re-located to central Maine.²

3.1.2. Features of Eastern New England English

Several variable linguistic features are documented for speakers in Eastern New England. The Linguistic Atlas of New England fieldwork documents a merged low front vowel for the BATH and TRAP lexical sets³ (Kurath 1939, 1943). Later studies (e.g. Laferiere 1977) of Boston show that these vowels are less uniform.

Kurath (1939, 1943) observes that the LOT and THOUGHT lexical sets are distinct in western New England. However, these vowels are merged by speakers in Eastern New England.

The GOAT vowel has been reported in Eastern New England as being produced with several variants (Avis 1961), including an up-gliding diphthong [aw] appearing word-finally and a second in alternation between [ɔ] and a fronted in-glide [əʊ].

Post-vocalic-R drop (i.e. variant pronunciation of /r/ in a syllable coda) has been found to be in remission not only in New England (Irwin and Nagy

² It is important to note that before Maine was settled by English or French settlers, aboriginals were present throughout the state, including on MDI. Three major tribes populated the state: The Micmac, Passamaquoddy and Penobscot.

³ Lexical sets are in reference to standard productions of English vowels (Wells 1982); each vowel in the vowel quadrilateral represented by its own lexeme.

2007) but also in other locations where this feature is part of the local variety, such as in the southern United States (Weaver 2000, Feagin 1998).

The Canadian pattern of Raising (i.e. a raised production of PRICE and MOUTH in pre-voiceless contexts) has been reported in Calais, ME (a border town) by Miller (1989) and in the Linguistic Atlas of North America (Labov and Ash (2006). Kurath and McDavid (1961) found patterns similar to Canadian Raising in coastal Maine and southern New Hampshire, but the pattern has not been reported elsewhere in New England except Vermont (Roberts (2007). In Maine, these patterns with respect to Raising and other Canadian norms are found further into the state, though said pattern is found to be weaker and more broken as one travels further from its source (Burnett 2006), following observations in wave theory (Labov 2007).

In addition to these mergers and the introduction of new norms to their speech, a number of pre-rhotic mergers are reported in the speech of eastern New England speakers, especially strong in Boston (Nagy 2001). Those of BOTHER/FATHER, MARY/MERRY/MARRY however, are weaker as one moves away from the urban center and into rural areas.

3.2. Locating and Entering the Speech Community

My initial contact with the MDI community occurred in May of 1986 (I was eleven months of age). My mother (a native speaker of the local variety of English) re-located to Mount Desert, one of this island's four towns, from the city

of Bangor, Maine (fifty miles to the north of the coastal area). Having grown up in the community, I am in the unique position as a researcher of being considered “native” (and therefore, an insider) by other community members. Such an insider status has clear benefits for the researcher, especially concerning the Observer’s Paradox (Labov 1972b), whereby the presence of a researcher influences the linguistic features used by speakers; in other words, it is difficult to elicit speech from a speaker as they would use the features in their normal speech in the community due to the presence of the researcher. With my insider status, participants in my study were not focused on my position as a scientific researcher and were more at ease. Therefore, it was more possible to elicit and record their natural speech.

It should be noted that despite my status as an insider, I have spent the majority of my adult life outside of the community. At age 18, I relocated to Orono, Maine to attend the University of Maine. Five years later, I relocated to Portland, Maine for employment. Five years later, I relocated again to St. John’s, Newfoundland to pursue graduate studies at Memorial University.

My most recent contact with the speech community came in August 2012 when I relocated to the speech community, asking my parents if it was acceptable to board with them while I conducted fieldwork and worked out arrangements for my stay.

3.3. Recruitment

I did not rely on a solitary recruitment strategy, as I sought a varied sample of the community. Different social groups have been observed to have different access, ability and usage patterns with respect to technologies such as social media (Tagliamonte and Denis 2008). This difference is especially apparent between older and younger speakers. In order to perform a synchronic analysis of the MDI speech community using the apparent time hypothesis (Labov 1972a, Bailey et al. 1993, Boberg 2000, Chambers 2002) it is necessary to reach out to different age groups using different recruitment methods.

Josey (2004) notes in her study of Martha's Vineyard that "New Englanders are very private people." This has been my experience as well, and is borne out in that my own recruitment methods were only productive when I reached out to people in the community one-on-one (either through electronic media or in person, depending on their age group). Although I did get the word out on the project through other means (i.e. through general advertising of the project), these methods were not productive in recruiting informants for sociolinguistic interviews. A successful strategy in recruiting younger informants (aged 15-30) was through the use of electronic resources, including the use of social media sites such as Facebook and Twitter as well as direct contact through e-mail.

Other strategies for getting the word out about the project focused on promoting awareness about the project and reaching out to speakers beyond my current social network. I asked local area businesses if it was all right to put up a poster somewhere at their establishment, and I also circulated a classified ad in the local newspaper and the local church bulletin. I note that these methods were not as effective as social media in recruiting informants; however, they were effective in reaching out to older members of the speech community in order to make the “first step” in getting a conversation about the project going, which often proved necessary with older speakers to obtain an interview.

3.4. Participant-Observation Method

Lane (2000) notes “the incorporation of ethnographically sophisticated quantitative data with thorough social network data has been proven and accepted as an important advance in modern sociolinguistics.” My own research follows her insights making use of the participant-observation method (e.g. Bucholtz 1999), Atkinson and Hammersley 1994) which simultaneously identifies myself as both observer and participant. My research draws not only on sociolinguistic interview data (its primary source) but also on personal observations as a participant-observer made through direct observations, informal and formal interviews and life experiences as a member of the group.

Hoswell (1972) indicates four stages necessary for participant-observation research.

- Establishing a rapport
- Working in the field (i.e. doing as the locals do)
- Recording field observations for posterity
- Analyzing data.

As a native member of the speech community, establishing a rapport and working in the field (i.e. establishing myself as local) were accomplished before I re-entered the community to begin fieldwork for this project. Observations made after re-entering were recorded, and this data (along with linguistic corpora) were analyzed together for the purposes of drawing conclusions concerning the local identity practices and accommodation strategies of speakers in the community in their use of local and non-local language features.

When I re-entered the community, the means by which I gained lost rapport were chiefly through involvement in activities with locals. I integrated myself through social media (e.g. Facebook) and spent time enjoying extra-curricular activities including my church's choir and a Dungeons and Dragons game. Previously existing relationships provided an excellent point of entry for sociolinguistic interviews (especially for older speakers). People I knew would often introduce me to other people in the community.

Labov (1972a) cautions against the "friend of a friend" approach due to the possibility of biased sampling. He notes several ways to avoid said bias, and that one who wants to "explore the speech community should enter himself,

avoiding introductions from friends, schools and formal institutions.” Aware of this advice but not wishing to forfeit the obvious benefits to studying a community as an insider, I addressed the possibility of biased sampling in a number of ways. First, I endeavoured to participate in new activities in the community in order to extend my social network. Second, I used a range of recruitment strategies to reach out to the community at large.

3.5. The MDI Corpus

I recorded sociolinguistic interviews with 12 locally born and raised community members. I define a native born participant as a person who spent their formative years in the speech community. It is important to note that I did not exclude non-native speakers from participation in the study; however, they were excluded from analysis. This exclusion criterion ensured that the informants who were included in the corpus provided a sample of the local speech variety.

I collected a sample balanced for age and gender, as shown in Table 3.1 below, in order to examine the trajectory of language change in the community using the apparent time hypothesis (Labov 1972a, Bailey et al. 1993, Boberg 2000, Chambers 2002). With no previous work available on language use on MDI, it is not possible at the time of this study to accomplish a real-time analysis of the speech community’s language use, therefore an apparent-time analysis is the best choice to analyze the speech community’s language use today. Table 3.2 below

provides detailed information concerning the coding levels selected on external factors examined in this study. I discuss how coding levels were selected below.

Table 3.1 The Mount Desert Island Corpus

<u>Gender</u>	<u>1999-1985</u>	<u>1984-1950</u>	<u>Born Before 1950</u>	<u>Totals</u>
Male	2	2	2	6
Female	2	2	2	6
Totals	4	4	4	12

It should be noted that the age stratification here reflects three distinct life stages that are important in a working class community. The youngest age group, born between 1999-1985 and aged⁴ 15-29 at the time of the study, has limited work experience and consists mostly of students. Those who are employed in this age group mostly have temporary (e.g. summer) employment and if they are employed in the winter, are likely not in a career oriented job. The middle age group, born between 1984-1950 and aged 30-64 at the time of the study, has significantly more work experience than those in the younger group. Most are currently employed year-round (if they have a summer position, it is likely in addition to regular employment). They are also more likely to be in a career-oriented position and to be in a more advanced position with their company, and the majority of this age group is still working. The oldest speakers, born before 1950 and older than 65 at the time of the study, have more work experience than any other group but are likely retired (if they are working,

⁴ Ages are reflected on the time when interviews were conducted in 2014.

it is likely in summer employment or in otherwise part-time or temporary employment).

All four speakers sampled of the middle generation were examples of "professional, career-track" workers. The youngest generation showed more variability. Two speakers work only during the summer months in highly tourist-oriented jobs, and are also students at the local area high school. A third speaker generates their entire income from such seasonal sources of employment, while the final speaker has a professional-track career-oriented position. Finally, for the oldest generation, three speakers were retired and one was still working in a career-oriented professional position. It should be noted that as a result of the small sample size, the "middle generation" was distributed across a wide age range to avoid empty cells.

Table 3.2 A demographic description of MDI corpus speakers

Speaker 02-01-14-01: 30-year old male (born 1984) with a loose social network, a non-local source of capital, life-long resident of Bar Harbor (excepting to go to school), college education.

Speaker 02-01-14-02: 86-year old (born 1968) female with a dense social network, neither source of capital, not a life-long resident but a resident of Bar Harbor, required education only.

Speaker 03-02-14: 65-year old female (born 1949) with a dense social network, local source of capital, life-long resident of Bar Harbor, required education only.

Speaker 04-08-14: 15-year old male (born 1999) with a loose social network, non-local source of capital, life-long resident of Bar Harbor, required education only.

Speaker 04-19-14: 87-year old (born 1927) Male with dense social network, neither source of capital, life-long resident of Mount Desert, college education.

Speaker 09-11-14: 29-year old (born 1985) Male with dense social network, non-local source of capital, life-long resident of Bar Harbor, required education only.

Speaker 09-16-14: 64-year old (born 1950) Female with dense social network, local source of capital, not a life-long resident but a resident of Mount Desert, college education.

Speaker 09-18-14: 28-year old Female (born 1986) with loose social network, Non-local source of capital, life-long resident of Bar Harbor, college education.

Speaker 09-28-14: 62-year old Female (born 1952) with dense social network, Local source of capital, life-long resident of Trenton, college education.

Speaker 10-08-14: 64-year old (born 1950) Male with loose social network, Non-local source of capital, life-long resident of Mount Desert, required education only.

Speaker 10-19-14: 16-year old Female (born 1998) with loose social network, Non-local capital, life-long resident Mount Desert, required education only.

Speaker 10-10-14: 78-year old (born 1936) Male with Dense social network, neither source of capital, life-long resident of Bar Harbor, required education only.

3.6. Sociolinguistic Interviews

Linguistic data for this project was collected using a traditional approach in variationist sociolinguistics known as the sociolinguistic interview (Labov 1972a, 1984). Labov (1984) describes the sociolinguistic interview as a well-developed strategy defined by a number of goals, the most important of which is to record one to two hours of recorded speech and a full range of demographic data for each speaker within a sample design. Labov suggests the interview proceed as a set of questions structured in a hierarchy. Tagliamonte (2006) notes that this approach is instrumental in recording the vernacular as it occurs within the speech community. In his notes on field methods, Labov (1984) indicates that the vernacular is the primary object of analytical interest for the linguist when collecting data in the field. This follows from his earlier observation in Labov (1972b) that the vernacular is where “we find more systematic speech, where the fundamental relations which determine the course of linguistic evolution can be seen more clearly.”

Sociolinguistic interviews were digitally recorded using two audio-recording devices. First, an M Audio Track III recorder (using a CF flash drive) with an external lapel microphone. Second, a Tascam DR-05 (using an SD flash

drive) with an internal microphone. All recordings were encoded in WAV format at a rate of 16 KHz and 24 bits/second (DiPaolo and Yeager-Dror 2011).⁵

Interviews were conducted one-on-one with informants. Typically, I met with informants at their residence for interviews. Interviews lasted between an hour and two hours.

Upon meeting the informant, I typically engaged them in small talk. After establishing a threshold of comfort with the informant and learning a bit about their interests as a foot-hold, I would introduce the recording equipment and ask if it was acceptable to set it up (and for what purpose. After the informed consent process, I would begin with the interview proper; beginning with the questionnaires and then moving to the production tasks, which are detailed below. I also discuss interview techniques, which are taken from previous studies in other communities, in order to ensure that I captured samples of vernacular speech.

3.6.1. Questionnaires

Informants were given two questionnaires (see Appendix B) to collect information needed for analyses of external (social) factor groups. The first questionnaire concerned the informant's demographic background (age, gender, current residence, occupation). The second questionnaire framed the social

⁵ An objection was brought up at the time of my defence that this sampling rate (kHz) was insufficient for the acoustic analysis of vowels. At the time of my defence, all interviews were already recorded at the setting noted.

network and linguistic market and capital analyses (i.e. loose or dense network, dependent on local or non-local economy) (Milroy 2000, Bourdieu 1972, 1986, 1991). Although these analyses were also informed by the conversation portion of the interview, the questionnaire provided a framework for the analyses.

3.6.2. Production Tasks

After the questionnaires, informants were asked to do three production tasks. These tasks were organized by speech style, operationalized by attention to speech Labov (1972b, 1966) and were executed in a step-down model of formality. In other words, the informant began with the most formal task (the word list) and gradually stepped down in formality until the interview concluded with the least formal production task: the conversation. The tasks were as follows:

- **Word list**, the most formal style, in which informant read 30 words from index cards (see Appendix B). This task was repeated once (words presented in a random order).
- **Reading Passage**, an intermediate formal style, where the informant read a short story of 500 words (see Appendix B) which I wrote about a father and son visiting the area from North Carolina.
- **Conversation**, the least formal style, where the informant and I conversed using techniques outlined below for roughly 45 minutes. The informant generally led the topic of conversation and my role was that of a facilitator.

3.6.3. Interview Techniques

Milroy (1987) notes “for the purpose of studying the social meanings that speakers assign to language it is important to obtain maximum access to the vernacular.” A variety of techniques were used during the interview in an attempt to elicit the vernacular (i.e. the every-day-speech) of the informant and avoid effects such as style-shift as a result of attention paid to speech, the observer’s paradox (Labov 1966, 1972b), the interviewer effect or the influence of the presence of recording equipment. (DiPaolo and Yeager-Dror 2011).

I used a tree method (e.g. Josey 2004) for sociolinguistic interviews, in which the analyst determines a core topic of interest for the informant, then facilitates further discussion from the informant using “branches” of related topics (i.e. a core trunk topic leads upward to branches, which leads outward to other branches and eventually, a new tree.) This technique involved the incorporation of my own knowledge on the subject, or asking the informant to bring more information to bear on the topic. I found this technique to be useful in the elicitation of natural speech.

Another technique I attempted was a traditional technique used in sociolinguistic interviews (Labov 1966, 1972b, 1984). I asked informants a set of open-ended questions designed to distract the informant from the interview task. These questions included:

- **Danger of death** “Have you ever been in a situation where you thought this is it, I’m going to die? Tell me about it.”
- **Moral indignation** “Have you ever been in a situation where you got away with something you shouldn't have and you thought better of it later? Tell me about it.”
- **Male-Female interactions** “What’s your opinion on how dating works today?”

For this project, the tree method was effective at eliciting recorded vernacular speech while these questions seemed to leave informants confused (with the notable exception of danger of death). Although they did eventually respond with stories, many speakers were hesitant to offer opinions on male-female interactions (this could be due to the character of the community) and were equally hesitant to admit to moral indignation. If anything, I found that the inclusion of these questions was counter-productive to the elicitation of natural speech.

3.7. Ethical Considerations

A primary concern of this research which involved contact with human subjects in the MDI community was to ensure that participation was voluntary and without risk to its participants, and that it was also beneficial to the community.

This research has received approval from the Interdisciplinary Committee on Ethics in Human Research (ICEHR). Approval was issued on November 11th,

2013 and the committee permitted contact with human participants until November 30th, 2014. It should be noted that I was permitted contact with minors living in the community (informants under the age of 18) by the committee. Special provisions were made for these informants, as both their legal guardian's (for legal reasons) in addition to their own consent was required for participation in the study.

3.8. Dependent Variables: Linguistic

Two linguistic (dependent) variables were chosen to investigate the research questions introduced in Chapter 1. One is the use of PVR on MDI, variably attested in the speech patterns of Eastern New England English (Irwin and Nagy 2007, Roberts and Nagy 2004, Reid 2007). The second is Canadian Raising (Chambers 1973), identified with speakers of Mainland Canadian English, on whom residents of MDI are socioeconomically reliant.

3.8.1. Dependent Variables I: PVR

Having grown up in the MDI community, I have been able to identify local linguistic variables of interest through observation based on their salience to members of the community (i.e. residents of the speech community are able to comment on their usage) as well as their analytical practicality. The variable use of one such feature in Eastern New England, the dropping of post-vocalic R (PVR), is well documented in the region (Stanford et al. 2012, Roberts and Nagy (2004, Irwin and Nagy 2007, Becker 2014). The use of this feature is salient to

residents of the region as well as to outsiders. This salience permits the feature to be enregistered (Johnstone 2011, Reid 2007) as a marker of local identity for outsiders and local residents. Local comedians (e.g. Lewis and Sample 1986) make use of the feature to lay claim to an authentic Maine identity.

PVR is a rule-based feature (see Figure 3.3 below for its operationalization). Previous work has shown that vowel height, back-ness, syllable weight, word position and word stress impact the selection of variants (Ellis et al. 2006, Feagin 1998, Irwin and Nagy, 2007, Labov 1966).

Figure 3.3 PVR Rule-Based Operation

Variable Context: "barn" or "car" /baɪn/, /kaɪ/

Variant I (R-less): [ba:n], [ka:] $\text{ɪ} \rightarrow \emptyset / \text{V_}\#$

Variant II (R-ful):" [baɪn], [kaɪ] (no change on surface from underlying representation).

As shown in this figure, the variable context of this feature targets /ɪ/ in a coda (i.e. where a lexeme's underlying representation has an /ɪ/ directly following a vowel, excluding intervocalic and onset contexts. For example, "barn", "car", "party". Two variants can be realized in this context. First, the standard **r-ful variant** can be described where the underlying vocalic /ɪ/ is pronounced in the surface representation. Second, the **r-less variant** can be described as when the underlying vocalic /ɪ/ is not pronounced in the surface representation. The deletion rule, which operationalizes the deletion of /ɪ/ from

the underlying representation so that it is not realized on the surface is not a comment on the grammar of the speakers living in the community and has only been used to demonstrate the rule-based operation of this feature in its variable use. Theoretical based studies (e.g. Kostakis 2010) seek to model the use of phonological features in tandem with social vestiges in optimality theory (Prince and Smolensky 1993) to account for how speech features are used variably and socially in different communities in the context of a predictable grammar paradigm. It is beyond the scope of the current work to account for the social use of PVR as used by members of the speech community within vestige theory or other phonological frameworks.

Examples of r-ful varieties of English (Weaver 2000) include Western New England English and Mainland Canadian English, both of which are in contact with Eastern New England English. Examples of r-less varieties include Eastern New England English and parts of England. Irwin and Nagy (2007) note that r-lessness is still in use by speakers in Boston, Eastern New England's major city, but its use is in decline among young generations, indicating a possible change in progress towards an r-ful variety.

I follow Feagin (1998), Ellis et al. (2006), Irwin and Nagy (2007) and Stanford et al. (2012) in their use of an impressionistic method of analysis of tokens of the underlying /vR/ variable context tokens in the MDI corpus. See Weaver (2000) for an alternative method of analysis of this variable context; an

acoustic methodology identifying F3 and higher formants. I extracted tokens of PVR through play-back in Praat, and I used native speaker judgment to decide whether the /ɹ/ segment was pronounced or not and coded the token accordingly (see Table 3.3 below).

Table 3.3: Levels Used in Analysis of PVR

Factor Group	Level 1	Level 2
Application Value: PVR	Dropped [ba:n] "barn"	R-Ful "barn" [baɹ n]

3.8.2 Dependent Variables II: Diphthongs /aj/ and /aw/

As previously noted in Chapter 2, speakers living in Maine and MDI are in contact with speakers of Canadian English, especially with those of the Maritime sub-variety. Thus, phonological features may be diffusing to the community as a result of contact. Prior research on Canadian English reveals a range of linguistic resources available to Canadians as a means to maintain a Canadian identity and to retain a social distance from perceived American hegemony in the form of General American English. These include yod-dropping Clarke (2006), (e.g. "coupon" [kjupon] or [kupon]), the use of discourse tags at the end of phrases such as "eh" (Tagliamonte and D'Arcy 2009, Avis 1954) and the Canadian Vowel Shift, (Clarke et al. 1995).

In this study, I focus attention on Raising, which is an identified marker of Canadian identity and is salient to American perception. Speakers of Canadian English are reported to produce the first element of the diphthongs /aj/ and

/aw/ with a raised quality in pre-voiceless environments (e.g. “like”, “about”) (Chambers 1973). These patterns are reported in the United States, though with a degree of phonological and social variation in their use (Dailey-O’Cain 1997, Vance 1987).

Labov (1972a) indicates in his study of diphthong centralization that these variables are ideal for study as they are common in English and are salient only to the linguist (i.e. they are below the threshold of perception for the informant). Although the variants are different than in Labov’s study, the variable context is the same, and these variables can still be presumed to be below the perception for speakers in the community. It follows that the variable use of /aj/ and /aw/ in the MDI community is a reasonable phonological feature for the investigation of dialect contact and accommodation of Canadian outsiders.

The variable context for Canadian Raising is any lexeme with /aj/ and /aw/, although it should be noted that the categorical Canadian pattern is only productive in a pre-voiceless environment (e.g. “kite,” “about”) while reports of Raising in the northern United States indicate that Raising may extend to other phonological environments (Vance 1987, Allen 1989, Dailey-O’Cain 1997).

In my data, tokens were measured in Praat following an upload to a Macbook Air computer (Boersma and Weenick (2015). The first procedure was to normalize data, in order to account for physiological differences between speakers. In order to best accomplish this, I follow the suggestions of Adank et

al. (2004). They suggest the Lobanov (1971) z-score transformation normalization method, which I applied to F1⁶ measurements for each speaker's data in the corpus using NORM (Kendall et al. 2007). This method was suggested over others in light of its performance in eliminating physiological differences between speakers while maintaining social information concerning variation between speakers.

One problem in sociophonetics research is to decide where to take measurements for formant values on tokens in order to remain consistent in the values for said measurements as well as to extract measurements from the steady-state of the vowel, which is the goal of sociophonetic experimentation according to (Hillenbrand et al. (1995). In order to account for this, I follow the recommendations of (Baranowski 2013, Evanini 2009) in taking formant measurements from the 30% duration mark of the diphthong results in the best, most consistent results (as opposed to the 50% mark for monophthongs).

A challenge to this study is providing evidence that any Raising pattern, should it emerge, can be identified as Canadian. Should such a pattern emerge, multivariate analyses will determine whether or not there is a means of transmission from Canadian speakers (in order to identify whether the Raising pattern is Canadian) and to determine if said pattern behaves similarly to the

⁶ F1 of /aj/ and /aw/ are the application values for these variables; they are continuous and do not have traditional "levels." F2 measurements were also taken but were not included in multivariate analyses.

Canadian pattern which delimited to activate in pre-voiceless environments.

Another challenge is to account for individual variation within speakers.

Following these methods of taking measurements from a single point of the diphthong and normalizing, I attempted to account for intra-speaker as well as inter-speaker variation.

Previous work on Raising (Boberg 2000) uses a threshold of Hz values to determine whether tokens of the /a/ nucleus are raised or not. In this study, linear regression of the tokens compared the mean F1 values (a gradient value) of the social groups considered and the differences between them to determine the presence of Raising (a change in progress in a contact community) and to determine which social groups practice it, following the assumption that a lower F1 value corresponds with a raised tongue articulation.

3.9. Token Extraction and Coding

Three variables were identified for extraction procedures: /aj/, /aw/, and /ɪ/ segments immediately following a vowel (excluding ambisyllabic contexts).

Each variable was realized as one of two variants, detailed below in Table 3.4.

GAE refers to speakers of General American English, MCE refers to speakers of Mainland Canadian English, ENEE refers to Eastern New England English and RP refers to received pronunciation (Great Britain).

Table 3.4. Variables and Variants Included for Extraction Procedures

<u>Variable Context</u>	<u>Variant 1</u>	<u>Variant 2</u>
Lexemes with the diphthong /aj/ “kite” ⁷	GAE: Non-raised [kajt]	MCE: Raised [k [^] jt]
Lexemes with the diphthong /aw/ “about”	GAE: Non-raised [əbawt]	MCE: Raised [əb ^u wt]
Underlying /Vr/ “car”	MCE/GAE: Vocalic [kaɪ]	ENEE/RP: R-less [ka:]

As table 3.5 below shows, a balanced number of tokens were extracted from each speech style (word list, reading passage, conversation) and each variable for each informant, with the conversation style representing the majority of extracted tokens for each variable in order to best analyze the vernacular of the speaker and to control for the effects of speech style as operationalized by attention to speech (Labov 1972b), as well as to ensure adequate empirical coverage of variable contexts. In the word list and reading passage styles, the same tokens were extracted from all informants (see appendix B). In the conversation style, the first 24 tokens of each variable were extracted. This resulted in 48 tokens per variable for each informant, 144 total tokens across all contexts. A total of 1,728 tokens were extracted for analysis.

⁷ Please note - although presented in Table 3.4 as categorical variants, the present research uses linear regression to analyze this variable (in addition to the /aw/ context).

Table 3.5. Tokens Extracted from Each Informant (N = 1,728)

<u>Variable Context</u>	<u>Word List</u>	<u>Reading Passage</u>	<u>Conversation</u>	<u>Total</u>
/aj/	12	12	24	48
/aw/	12	12	24	48
/Vr/	12	12	24	48
Total	36	36	72	144

3.9.1. Phonological Factors

I test the phonological environments of tokens of /aj/, /aw/ and PVR in order to assess the impact of grammar-internal factors on language change in the community.

The preceding and following environments of tokens of /aj/ and /aw/ were coded for voicing ([+voice] or [-voice]), manner, place, and whether the following segment was in the coda of the diphthong or in the onset of the following syllable. Segments which were ambiguously in the coda of the diphthong and onset of the following syllable were coded as “coda” segments. Previous work on the variable production of /aj/ and /aw/ indicates that speakers consider these factors in their selection between variants (Dailey-O’Cain 1997, Pope 2007, Labov 1972a, Chambers 1973).

Previous work on PVR (Weaver 2000, Irwin and Nagy 2007, Labov 1966) indicates that word stress, syllable weight and vowel quality influence the production of /ɹ/ in r-less varieties of English. I coded tokens of /ɹ/ for these phonological factors. Vowel quality was coded in terms of privative features

(e.g. [high], [low], [front], [back]). In terms of syllable weight, tokens were coded as to whether the syllable was light or heavy. The following syllable structures were counted as heavy: VRC, VRCC (i.e. any circumstance in which /r/ was not the only segment material in the coda (Hyman 2003). Word stress was coded as whether or not the vowel received primary, secondary or no stress. Tables 3.6 and 3.7 below detail the levels and factor groups for grammar internal factors for the three variables.

Table 3.6. Phonological Factors and Levels: PVR

FACTOR GROUP	Level 1	Level 2	Level 3
Stress /vR/	Primary: /vR/ is assigned primary stress (e.g. parsley)	Secondary: /R/ is assigned secondary stress (e.g. folklore)	Unstressed: /vR/ is not stressed. (e.g. underwear).
Vowel Quality /vR/: Back-ness	[-Back] , the vowel in /vR/ can be identified with this distinctive feature.	[+back] , the vowel in /VR/ can be identified with this distinctive feature.	n/a
Vowel Quality /vR/: Height	[-high] the vowel in /vR/ can be identified with this distinctive feature.	[+high] the vowel in /vR/ can be identified with this distinctive feature.	
Syllable Weight	Light (vR syllable structure)	Heavy (VRC, VRCC, CVRC, etc.: /r/ is not the only segment material in the coda.	n/a

Table 3.7. Phonological Factors and Levels /aj/ and /aw/

Factor Group	Level 1	Level 2	Level 3	Level 4	Level 5
Voicing: Preceding	[+voice]	[-voice]	n/a		
Voicing: Following	[+voice]	[-voice]	n/a		
Manner: Preceding	[+nasal]	[+plosive]	[pause]	[+fricative]	[+approx]
Manner: Following	[+nasal]	[+plosive]	[pause]	[+fricative]	[+approx]
Place: Preceding	[+alveolar]	[+velar]	[+glottal]	[+bilabial]	[+labiodental] [+labiovelar]
Place: Following	[+alveolar]	[+velar]	[+glottal]	[+bilabial]	[+labiodental] [+labiovelar]
Codification	Yes, in coda	No; onset of next syllable	n/a		

3.9.2. Demographic Factors

The following summarizes the demographic (extra-linguistic) factor groups that I included for analysis. These groups have been found in other sociolinguistic studies to influence language variation, and so were included for consideration in this study.

- Speaker Gender; (e.g. Labov 1972a, Bucholtz 1999, Peng 1982). The levels chosen are based on the gender identity of the speaker as they offered it in response to the questionnaire; although this does fit into a gender binary choice; speakers were free to choose their response.

- **Speaker Age** (e.g. Tagliamonte and D'Arcy 2009, Irwin and Nagy 2007). The levels chosen are based on three generations, as described earlier, stratification of generations are framed around work experience; older speakers are typically no longer working, younger speakers are not working for a living (are typically students) and middle generation speakers are typically still working for a living and in career-oriented jobs.
- **Current Residence** (e.g. Boberg 2008, Labov 1972a). The levels chosen were simple: they were based on which town the speaker currently lives in.
- **Highest Level of Education**. Again, straightforward: either the speaker had only attended high school or had at least attended something beyond (it did not matter if they completed said post-secondary education).

Tokens were coded for these grammar external factors based on the informant's responses to the questionnaires at the beginning of the interview.

Table 3.8. Demographic Factor Groups and Levels

Factor Group	Level 1	Level 2	Level 3
Gender	Male	Female	n/a
Age	Born Before 1984	1985-1949	Born After 1950
Current Residence	Mount Desert	Bar Harbor	Trenton
Highest Level Of Education	Required-Only	Post-Secondary	n/a

3.9.3. Social Network

Based on responses to the social network questionnaire taken at the beginning of the sociolinguistic interview, I assessed an informant's social

network typology and coded them as having a loose or dense network for the purposes of studying the maintenance of local speech and being susceptible to incoming forms (e.g. Canadian Raising), as well as their willingness to accommodate the outsider (appendix B). If, based on responses to these questions, a speaker was determined to have a *dense* network in that they form few new relationships, the relationships they currently hold are strong (and generally with locals (and their contact is generally with other locals; these speakers were assigned to the dense category. If responses indicated that a speaker interacted frequently, or was required to, with tourists and non-locals, or if they were open to and engaged in frequent interaction outside one confined set of individuals then they were assed to the loose group.

Table 3.9. Factor Groups and Levels: Social Network Type

Factor	Level 1	Level 2
Social Network Type	Dense	Loose

3.9.4. Capital Market Score

I also gave informants a questionnaire designed to assess whether they were dependent on the local or non-local economy. Josey (2004) determines that there is a shift in meaning in diphthong centralization on Martha's Vineyard in part due to speakers' relationship to occupational type and whether they related to outsiders and tourists.

This score was informed by information provided during the conversation portion of the interview, though informants generally provided enough information in the questionnaire to determine whether they depended economically on non-locals or locals or belonged to a third “neither” group. This third group included persons who were unemployed, retired, or depended on both sources in such a way that they couldn’t be unambiguously said to depend on a single economic source in terms of localness. I assigned speakers to one of three groups: local, non-local and neither based on their responses to their questionnaires and these scores directly reflect on which source of income they were socio-economically reliant in order to test for the effects of market on their linguistic choices. Those who were assigned to the local group depend on local sources (i.e. they would still have a job even if the following summer no one visited). Those who were assigned to the non-local group depend fully on the summer visitors and are fully aware of this dependence. Those who fell into the third category constitute a variety of types, but could not fit into either the local or non-local group neatly as a result of their responses: they either had multiple sources of income, were unemployed, were students or were even retired. This group was ultimately collapsed into the non-local group given the nature of the community and that its speakers (a small number) fit the description of the non-local group far better than they could the local group, and had more reliance on non-locals than the local economy.

Table 3.10. Capital Score Factor Groups and Levels

Factor Group	Level 1	Level 2	Level 3
Capital Score	Local-Dependent	Non-Local-Dependent	Neither

3.9.5. Speech Style

Each token was also coded for speech style, operationalized as attention to speech (Labov 1972b), see table 3.11 below.

Table 3.11. Levels for Speech Style Factor Group

Factor Group	Level 1	Level 2	Level 3
Speech Style	Word List	Reading Passage	Conversation

3.10. Multivariate Analytical Tools

Multivariate analyses are a useful tool in testing the null hypothesis, that is, whether or not the use of variants by a factor group's use of a variable can be considered to be due to chance or if they were statistically significant (i.e. is said use by that group signified of a pattern).

In the social sciences, a factor weight of less than .50 or a p-value of less than .05 are reasonable thresholds to reject the null hypothesis, and to accept that for a factor group that their use of the applied variant is statistically significant (i.e. the results are not due to chance). (Tagliamonte 2006). Testing of the null hypothesis through multivariate analyses is important (as opposed to just using distributional analyses) as multivariate analyses allow for a comparison on the

use of the dependent variables by the factor groups (independent factors) considered.

Due to the study's small sample size, there are many interactions which require modification of the data structure of the factor groups before multivariate analyses can be initiated. Before multivariate analyses proceeded, the following modifications were made in the analyses of all variables:

*Current Residence: residents of Trenton were collapsed to the Bar Harbor group. There was one single speaker in the Trenton group, and this speaker was born and raised in Bar Harbor and makes frequent trips to Bar Harbor.

I also collapsed a number of interacting groups together to account for their interactions, such as capital and social network type. As previously noted, before this procedure, capital was collapsed to two groups to match the two groups of social network. I.e. speakers who were scored as "neither" were collapsed into the non-local group first.

Table 3.12 Cross Tabulation Social Networks and Market

	Loose	Dense
Non-Local	240	193
Local	0	143

I considered the interaction of fixed factors by collapsing phonological groups in the analyses of /aj/ and /aw/, although this did not produce any new results. Rbrul also allows testing for random effects, but testing for such effects did not bear any new findings.

In order to test for the statistical significance of the factors studied, I utilized Goldvarb X (Sankoff et al. 2015), a computer program that uses logistic regression in multivariate analysis of binary dependent variables. It is a valuable tool; it allows the analyst to view correlations between independent factor groups and dependent groups as well as the interactions between independent groups as well as a descriptive analysis of the use of dependent variables.

However, Goldvarb is incapable of testing correlations on continuous variables. Another analytical tool was necessary in order to test the social meaning of Canadian Raising in the community, as Raising was measured using the F1 values of the nuclei of /aj/ and /aw/ diphthongs, which are continuous in their nature and require linear regression in their analysis. Therefore, to identify the community's social uses of Raising I utilized Rbrul, a computer software program that uses the R environment (Johnson 2009). Rbrul is a tool for multivariate analysis like Goldvarb X; however, it permits both linear and logistic regression and therefore permits the analysis of continuous dependent variables, such vowel height (measured by F1 values). It should be noted that Rbrul operates through an analysis of p-values less than .05 to determine statistical significance of factor groups. It is the general opinion of the American Statistical Association (Wasserstein 2016) that p-values of less than .05 are ineffective at testing the null hypothesis. This is problematic in that to test the null hypothesis in social sciences, we require a threshold of .05 to determine that

if said p-values are less than this it is safe to reject the null hypothesis and accept that said results are not due to chance and are statistically significant.

This shortcoming is of note.

3.11 Conclusion

This chapter reviews the study design of the thesis and addresses ethical concerns raised by the risk groups involved in the study. I also detail the procedures taken to ensure that any participant, regardless of age, was informed of the risks and benefits to their participation and participated of their own volition. This design allows for an examination of local identity practices on MDI through speakers' use of PVR, the results of which are presented below, and an identification of the introduction of Canadian Raising to the community, also presented in the following chapter.

4. Results

The primary linguistic analyses in this project examine the frequency and distribution across social groups of three linguistic variables in the MDI community: the acoustic variants of the nuclei of /aj/ and /aw/ and the variants of PVR.

Table 4.1 below details the number of tokens of each phonological variable extracted across speech styles. The extraction numbers fell short of expectations as outlined in Chapter 3. This is generally a consequence of ambiguous data (e.g. a PVR token was ambiguous as to which variant was used, and there was no

other possible token to extract in that speech style). However, enough tokens remain following extraction for robust analysis.

Table 4.1. Tokens Extracted for Analysis: MDI Corpus

Variable	Word List	Reading Passage	Conversation	Totals
PV-R	144	144	288	576
/aj/	144	144	282	570
/aw/	144	141	184	469
Totals	432	429	754	1,615

In this chapter I present the results of these descriptive and inferential analyses, first for PVR and then for the Raising of /aj/ and /aw/.

4.1. PVR

As previously noted, 576 tokens of PVR were impressionistically analyzed in this study. Only 250 of these tokens (those taken from interviews with speakers born before 1985) were included in multivariate analyses. This is a consequence of the younger generation's categorical use of the r-ful variant as discussed below.

Analyses were performed using Goldvarb X Sankoff et al. (2015). To review from Chapter 3, the following social and phonological factor groups were included in these analyses.

- Speech style
- Gender
- Age

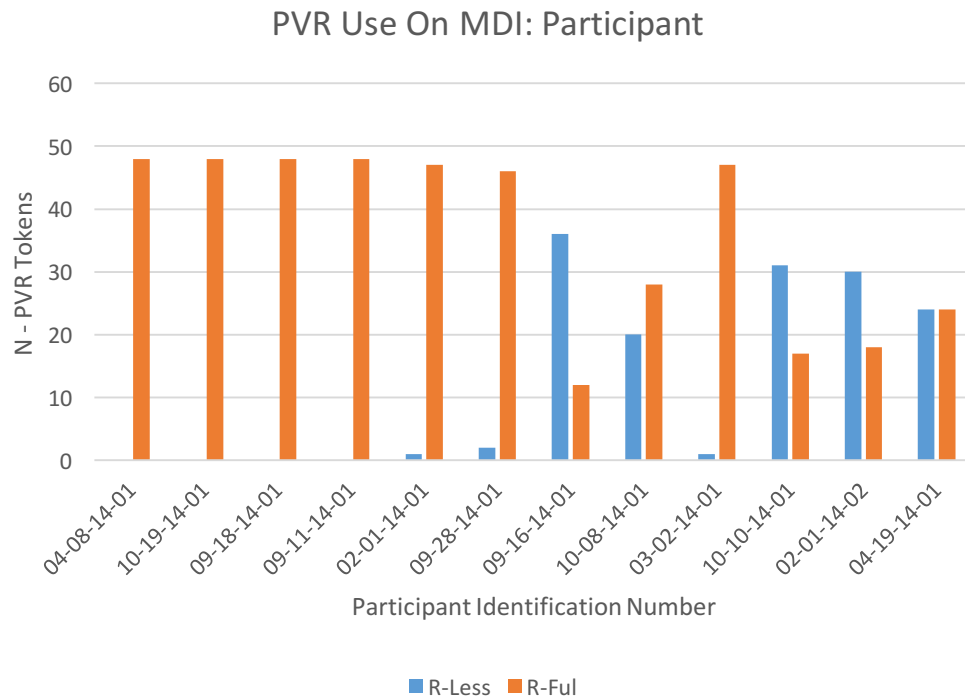
- Social network type
- Capital score
- Vowel quality: height
- Vowel quality: (+/-Back)
- Syllable weight
- Word stress

A number of modifications of the data structure were taken in order to account for knockouts, interactions, and singleton groups, so that multivariate analyses could proceed. These modifications are detailed previously in Chapter 3.

When I examine the distribution of variants across generational groups (Figure 4.1), it is clear that the younger generation is categorical in their use of the r-ful variant, although the older generations are variable.

Figure 4.1 clearly shows the differences between informants: several informants, even outside the youngest group, rarely use the local variant.

Figure 4.1. Distribution of R-less PVR variants by Informant on MDI



The interaction of factor groups due to sample size (i.e. there were not enough speakers in the corpus to represent all the factor groups investigated in the study) presented a problem to be corrected. Table 4.2 shows the first attempt at trying to correct this problem, through combining capital score and social network type into a single factor group while maintaining a consideration of all the original factor groups. Other runs were executed after this in a similar fashion: they could not resolve the issue of data interactions. As is clear from this table, the data (marginals) do not fit as expected into the statistical model presented by the factor weights (i.e. factor weights favor the r-less variant when marginals disfavor, and vice versa).

Table 4.2 Initial Logistic Analyses to the Choice of R-less Variants on MDI

Log Likelihood			-189.545
Significance			0.046
Degrees Of Freedom			16
Corrected Mean			.300
N			384
<i>Factor Groups</i>	Factor Weight	N	% R-Less
Social Networks & Market			
Loose/Non-Local	.20	96	21.9%
Dense/Non-Local	.93	145	58.6%
Dense/Local	.15	143	27.3%
RANGE		78	
Current Residence			
Bar Harbor	.31	240	27.1%
Mount Desert	.80	144	55.6%
RANGE		49	
Speaker Gender			
Male	.30	192	39.6%
Female	.70	192	35.9%
RANGE		40	
Speaker Age			
1985-1950	.72	192	30.7%
1950 And After	.28	192	44.8%
RANGE		44	
Stress: /Vr/			
Primary	.44	236	22.2%
Unstressed	.57	103	45.6%
Secondary	.64	45	48.9%
RANGE		20	
Vowel Quality: /vR/			
[+back]	.33	93	41.8%
[-back]	.56	131	24.7%
RANGE		23	
<i>Speech Style</i>			
Word List	[.52]	96	38.5%
Reading Passage	[.58]	96	41.7%
Conversation	[.45]	192	35.4%
RANGE		13	

<i>Highest Level Of Education</i>			
Degree	[.57]	144	27.1%
Required-Only	[.46]	240	44.2%
RANGE	.11		
<i>Syllable Weight</i>			
Heavy	[.51]	194	35.1%
Light	[.49]	190	40.5%
RANGE	.02		
<i>Vowel Quality: /vR/</i>			
[-high]	[.56]	153	35.3%
[+high]	[.46]	58	32.8%
[mid]	[.46]	170	41.8%
RANGE	.10		

Despite several attempts using these original factor groups, this could not be resolved. It was found that age and gender are a significant source of interaction for the other factor groups: either men, women or one of the generations did not have representation. To resolve the interactions, especially for capital score (a key factor group for this study's research questions), age and gender were consolidated into a single factor group. I then took into consideration interactions between both age and gender and capital. In order to rectify this problem, two separate runs were conducted, as will be shown below in tables 4.3 and 4.4. Table 4.3 shows the logistic regression analysis of age and gender with other factors considered (except capital) while Table 4.4 shows that of capital score with age and gender excluded. In following this procedure, as is clearly shown, the previous interactions were abated. In Tables 4.2, 4.3 and 4.4 factors favoring r-lessness (i.e. those generating a factor weight greater than .50)

are presented in boldface type. Factor groups disfavoring r-lessness are presented in plain type. Non-significant factor weights are given in square brackets.

These results reflect the use of only the older speakers of the community, as those born after 1985 were categorical in their use of the r-ful variant and in being invariant are not necessary to include in multivariate analyses (Guy 1988).

Table 4.3 Age and Gender (Capital Excluded): Factors Selected as Significant to the Choice of PVR variants on MDI

Log Likelihood			-233.614
Significance			0.019
Degrees Of Freedom			14
Corrected Mean			0.378
N			384
<i>Factor Groups</i>	Factor Weight	N	% R-Less
Age and Gender			
Middle Generation Male	.33	96	21.9%
Older Generation Male	.67	96	57.3%
Middle Generation Female	.53	96	39.6%
Older Generation Female	.49	96	32.3%
RANGE	34		
Vowel Quality: Back-ness			
[-back]	.55	291	24.7%
[+back]	.36	93	41.9%
RANGE	19		
Word Stress			
Primary	.45	236	32.3%
Elsewhere	.58	148	46.6%
RANGE	13		
<i>Speech Style</i>			
Formal	[.55]	192	40.1%

Casual	[.45]	192	35.4%
<i>RANGE</i> 10			
<i>Syllable Weight</i>			
Heavy	[.49]	194	35.1%
Light	[.51]	190	40.5%
<i>RANGE</i> 02			
<i>Vowel Quality: Height</i>			
[-high]	[.51]	125	38.7%
[+high]	[.44]	58	32.8%
<i>RANGE</i> 07			

Table 4.3 shows a number of patterns emerge concerning the use of PVR on MDI. First, age and gender are selected as significant, with male speakers born before 1950 and female speakers born between 1985-1950 favoring PVR. Word stress also emerges (as expected from previous studies on PVR) with unstressed and secondary stress syllables (i.e. not primary stress) showing a favoring effect and primary stress showing a disfavoring one. As previously noted, due to interactions and in order to adequately address the research questions of this project, a subsequent run, considering capital score separately, is necessary, the results of which are presented below.

Table 4.4 Capital Score (Age and Gender Excluded): Factors Selected as Significant to the Choice of PVR Variants on MDI

Log Likelihood			-224.847
Significance			0.010
Degrees Of Freedom			12
Corrected Mean			
N			384
Factor Groups	Factor Weight	N	% R-Less
Social Networks & Market			
Loose/Non-Local	.33	96	21.9%
Dense/Non-Local	.72	145	58.6%
Dense/Local	.39	143	27.3%
RANGE	39		
Vowel Quality: Back-ness			
[+back]	.36	93	24.7%
[-back]	.55	291	41.9%
RANGE	19		
Word Stress			
Primary	.44	192	39.6%
Elsewhere	.59	192	35.9%
RANGE	15		
<i>Speech Style</i>			
Formal	[.55]	192	40.1%
Casual	[.45]	192	35.4%
RANGE	10		
<i>Syllable Weight</i>			
Heavy	[.51]	194	35.1%
Light	[.49]	190	40.5%
RANGE	02		
<i>Vowel Quality: Height</i>			
[-high]	[.51]	123	38.7%
[+high]	[.44]	58	32.8%
RANGE	10		

As is shown in table 4.4, although capital score (as a collapsed group with social network) emerges as significant, with speakers with a dense network depending on the non-local tourist economy favoring the r-less variant, no other social factors emerge as significant in this run. A number of phonological considerations emerge, as expected in accordance with other studies on PVR in the literature: back vowels and the absence of primary word stress disfavor the r-less variant.

4.2. Acoustic Analysis of The /aj/ and /aw/ Diphthongs: Raising

In this section I discuss the multivariate analyses of phonetic variants of /aj/ and /aw/ across apparent time in varying phonological environments in order to identify the possible use of Canadian Raising in the community. The variable being analyzed is vowel height, as represented by F1, which is in an inverse relation with height (i.e., a lower F1 value represents a higher vowel realization).

Linear regression analyses were carried out using the step-up/step-down method in Rbrul (Johnson 2009), as detailed in Chapter 3.

Tables 4.3 and 4.4 below detail the results of linear regression analyses on F1. Each table details the factor groups selected as significant for each variable based on p-values (rounded to the hundredth place). Groups with p-values equal

to or less than .05 (significant) have been presented in bold face type with the mean normalized values (rounded to the tenth place) for each factor group.⁸

Table 4.5. Phonetic variants of vowel height of /aj/

Deviance			943,683.6
Degrees Of Freedom			13
Grand Mean			565.57
Factor Groups	R-Coefficients	Tokens (N=)	Mean F1
Current Residence p = 0.0234			
Mount Desert	4.368	139	571.17
Bar Harbor	(4.368)	386	562.53
RANGE			8.64
Speaker's Age	p<.01		
Before 1950	9.971	193	570.13
After 1985	(0.203)	192	564.87
1985-1950	(9.787)	190	561.65
RANGE			8.48
Voicing: Preceding Segment p = 0.00607			
Post-Pause	10.981	75	576.47
Post-Voiceless	(4.331)	192	566.92
Post-Voiced	(6.55)	308	562.08
RANGE			14.39
Voicing: Following Segment p<.01			
Pre-Pause	6.048	77	568.36
Pre-Voiced	6.298	316	571.32
Pre-Voiceless	(12.346)	182	554.42
RANGE			16.90
Social Network & Market p = 0.0154			
Loose/Non-Local	8.222	237	567.99
Dense/Local	(0.805)	145	560.97
Dense/Non-Local	(7.417)	193	566.04
RANGE			7.02

⁸ Negative correlations are indicated in these tables using parentheses.

Table 4.3 shows a number of social and grammar-internal patterns with respect to the height of the /a/ nucleus for the /aj/ diphthong. However, it is first important to note that distributional analyses show that the differences between groups are very small for these findings (ranging from 16.90 to 7.02 Hz).

A speaker's current residence, interestingly, was found to impact the height of the /a/ nucleus, with speakers living in Bar Harbor (the more tourist dependent of the regions) using a more raised variant than those living in the Mount Desert region.

Speaker age was also significant. The oldest speakers in the community (those born before 1950) avoid raising, the middle generation (those born between 1950-1984) raise the most, and those born after 1985 (the youngest generation) raise less than the middle generation, showing a pattern of U-shaped change.

The voicing of the preceding segment was also significant. While post-pause segments disfavor raising, post-voiced were the most raised, followed by post-voiceless. The voicing of the following segment was also shown to have an effect on the height of this variable. Interestingly, this variable follows the Canadian pattern (Chambers 1973). Pre-voiceless segments are the most raised, followed by pre-voiced with pre-pause being the least raised.

Table 4.6. *Phonetic variants of vowel height of /aw/*

Deviance			1,290,643
Degrees Of Freedom			5
Grand Mean			557.11
Factor Groups	R-Coefficients	Tokens (N=)	Mean F1
Current Residence p = 0.0422			
Bar Harbor	4.903	336	559.61
Mount Desert	(4.903)	171	552.22
RANGE			7.39
Gender p = 0.0178			
Male	(7.726)	249	557.57
Female	7.726	258	556.68
RANGE			0.89
Speaker's Age p = 0.0113			
Before 1950	(20.598)	170	548.14
1950-1984	15.839	159	558.72
1985 and After	4.759	178	564.25
RANGE			16.11
Social Network & Market p<.01			
Dense/Non-Local	23.401	168	561.25
Loose/Non-Local	(3.996)	216	559.22
Dense/Local	(19.405)	123	557.76
RANGE			1.46

Moving on to /aw/, Table 4.6 shows a striking finding, that the height of the /a/ nucleus by speakers on MDI was not phonologically conditioned, but was subject to some patterns similar to those found for the /aj/ nucleus. It should be noted that distributional analyses, as shown, similar to the results for /aj/, that differences between the groups found significant are again very small (ranging for /aw/ between 0.89 and 16.11) therefore resulting in the same

problems related to sample size and the validity of these findings. However, unlike with differences found between groups for /aj/, the differences for /aw/ are far too small to consider. Although a gender pattern emerges, the p-value is very close to .01 and with a difference between men and women at less than 1 Hz, this result cannot reasonably be considered statistically significant, or at the least, it is imperceptible. A similar decision can be reached on the finding concerning social network type and market score, with a difference between the groups at 1.46 Hz. In either case, it would be next to impossible to perceive these changes or to fine-tune changes in production to such a narrow range, therefore it is comfortable for this researcher to reject these findings.

However, a finding concerning residence does emerge. Speakers living in Mount Desert raise /aw/ more than those living in Bar Harbor.

Third, perhaps most surprising, is that the oldest generation uses the most raised variants with the middle generation using the least raised variants, followed by the youngest generation (suggesting a J-shaped change, although again upside down). This is a striking, unexpected result and a finding which is again in contrast to the findings for /aj/, in which the shape of the change is in the shape of a U.

What is further interesting to note is that distributional analyses of /aj/ and /aw/ show that the vowel space of these diphthongs show little variation between their use. In Figures 4.2 and 4.3 below, I show scatterplots for the F1

and F2 values of the nuclei of /aj/ and /aw/, respectively (the input values are based on non-normalized values). Squares indicate pre-voiceless environments, triangles pre-voiced, and circles are pre-pause.

Figure 4.2. Scatterplot: Height of the /aj/ Nucleus

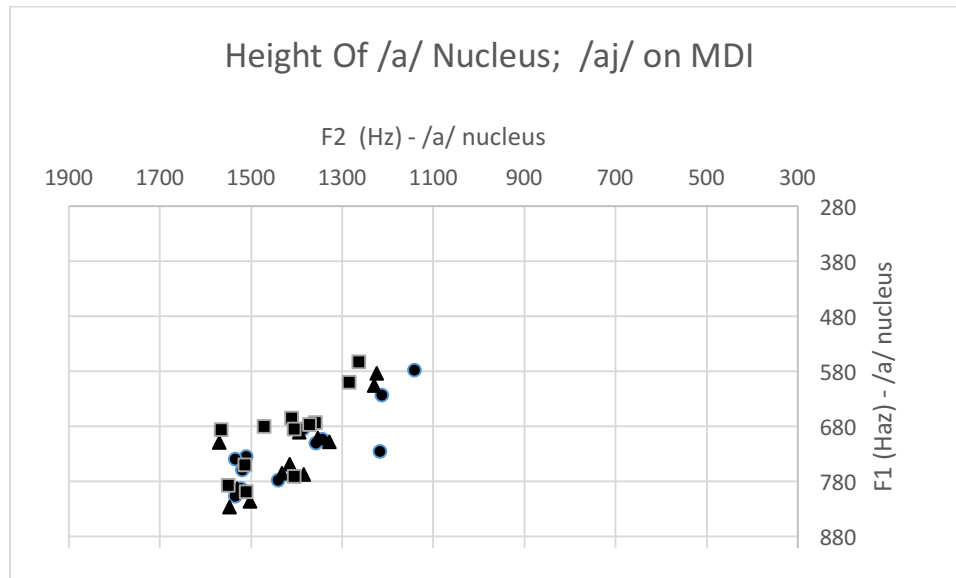
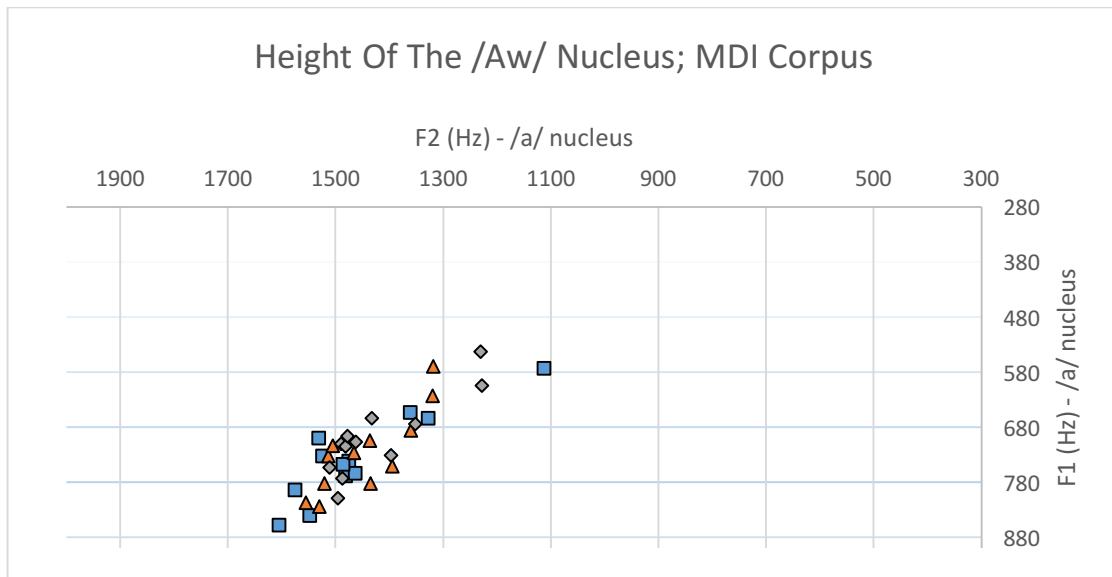


Figure 4.3 Scatterplot: Height of the /Aw/ Nucleus



As can be seen in Figures 4.2 and 4.3 the use of the /a/ nucleus in both diphthongs is similar for all speakers in all contexts, as speakers are demonstrating little variation in the distribution of the vowel space for either the use of /aj/ or /aw/. This is not a surprising result in the general lack of findings concerning phonological conditioning on the height of these diphthongs by these speakers. It is worth noting that the community's use of /aj/ and /aw/ in the pre-voiceless context appears to be distributed at a more dispersed use than other contexts.

4.3. Conclusion

This chapter presents the results of linear multivariate regression analyses of three linguistic variables on Mount Desert Island: one with local status, the other two being contact variables being introduced by non-local summer visitors.

With respect to PVR, I find that a change has taken place in the community, one which is in its final stages. Today the r-less variant is moribund, as seen in other Eastern New England communities e.g. Irwin and Nagy (2007). We also see that women have been responsible for the maintenance of the local status of this feature and its use in the community e.g. Josey (2004). Those who interact with and depend on the non-local economy are more than willing to use this r-lessness to maintain this part of the image of a "local coastal Mainer" (Reid 2007).

A wide range of social variation is observed in the height of the /a/ nucleus of /aj/ and /aw/ diphthongs. In particular, we observe differences in how /aj/ and /aw/ themselves compare socially.

Patterns with respect to the use of /aj/ seem to reflect a variable introduction of the Canadian pattern to the community (Dailey-O'Cain 1997), although said introduction reflects the process of diffusion in that speakers are exercising a wide degree of phonological and social variation in their selection between raised and non-raised variants of /aj/ (Labov 2007). Patterns with respect to the use of /aw/, however, are inconclusive. Although these could also be an introduction from the community to the north, it is more than likely that raising is simply happening in free variation; there is no phonological pattern to the use of this diphthong in the community, and its social use is in opposition to the social use of /aj/.

5. Discussion

In this chapter, I discuss the social, quantitative and qualitative uses of the variants of PVR and Canadian Raising in the MDI community, based on the findings presented in Chapter 4. This chapter is organized by a discussion of the quantitative social and phonological patterns found operational on PVR and Canadian Raising.

5.1. Grammar External Factors Operational on Linguistic Change on MDI

In this subsection, I discuss the grammar external factors which are operational on language variation and change on MDI: speaker gender, capital score (i.e. their source of capital), speaker age, current residence, social network type, and speech style.

5.1.1. Speaker Gender and Speaker's Age

Asymmetry with respect to speaker gender is a wide-spread observation on language variation (Peng 1982, Bucholtz 1999, Labov 1972b). It is not surprising that a number of gender patterns emerge with respect to the choices between the variants on MDI.

In their use of PVR, middle aged women are found to heavily favour the r-less variant. An explanation must be offered as to why these women are leading the use of the non-standard r-less variant on MDI. In changes from above, following Principle Ia of Labov's (1972b) principles of linguistic change, we expect women to favor the incoming prestige forms. The favouring effect of women on the use of the r-less variant on MDI can be explained through the historical "local" status of PVR, which older women are maintaining through their use of this variant. These speakers, in addition to older men, are responsible for local identity maintenance on MDI according to these findings. Although it is not surprising at all to find that older men are favoring the use of non-standard local features (Labov 1972b), an explanation must be offered as to

why middle aged women are also favoring use of the dropped variant in the community.

The answer does not lie far away from MDI. Elsewhere in the Eastern New England region, on Martha's Vineyard, Josey (2004) finds that women are the ones responsible for maintaining a local identity through the use of diphthong centralization. I posit, given the evidence seen in the regression analyses and patterns seen in other communities, that middle-aged women (along with older men) on MDI are the ones primarily responsible for local identity maintenance. While older men are filling a traditional role following gender and age: these speakers are maintaining the use of PVR as this is what they have learned, they are refusing to adopt standardized changes and are clinging to the norms that they learned growing up.. First, a generational gap in local identity practice is apparent: younger speakers in the community show zero interest in maintaining the use of PVR. As a result, the need to maintain this local feature is apparent even for the middle-aged speakers. Women in the community, it appears, are more flexible in terms of their ability to resist incoming standardization than men.

Considering Raising, gender patterns also emerge. However, these patterns cannot be substantiated by these results. First, although a pattern emerges concerning the height of /aw/ it does not emerge on the use of /aj/. Second, distributional analyses on the mean F1 of men and women show a

negligible difference between the two groups of less than 1 Hz, a difference beyond perception to the human ear and thus presumably well beyond any speaker's ability to fine-tune changes in their production.

5.1.2. Capital Score (Source of Livelihood) and Social Network Type

A speaker's source of capital (i.e. their position on the linguistic market, Bourdieu (1972, 1996, 1986) is found to impact both PVR and Raising. This is in addition to social network type, which was collapsed with capital to account for interactions. This is a direct consequence of life in a tourist dependent community. Residents are aware of how their livelihood (market and capital) and their position relate to outsiders and the economy which is dependent on them, and are making linguistic choices in response to these positions. Speaker 09-14-14 comments that "we need the tourists, but we could do without the traffic."

Capital effects on PVR are easily explained in the context of previous work which studies locally-identified features in other coastal Maine communities Reid (2007). On MDI, we find that speakers whose position in the market forces them to be dependent on outsiders favour the use of the r-less (local) variant. This is, however, true only of those with a dense social network and not of those with a loose network. Although these results appear surprising at first, given that one may assume that a feature associated with the local variety of English would be more commonly associated with those working in jobs that

do not depend on outsiders, previous work on the regional variety (e.g. Reid 2007), Josey 2004) explains this finding.

Reid (2007) finds that speakers living on the coast of Maine use locally-identified features to perpetuate an image of the local resident associated with an unspoiled beautiful Maine coastline in order to promote the region for outsiders and tourism. Therefore, the use of local features in coastal Maine is tied to the market, and clearly speakers who are dependent on the non-local economy see the capital benefit of using these features in order to support their economic well-being.

The effect of capital on Raising is only partly similar. For /aj/, speakers with dense social networks depending on the non-local economy raise the most, paralleling the pattern for PVR. Although a pattern emerges for the height of /aw/, the difference between groups is negligible.

5.1.3. Speaker's Age

Age patterns emerge on the height of /a/ nucleus. An interesting shape emerges concerning the use of /aj/, with the middle generation using the most raised variants, followed by the youngest generation and the oldest generation being the least raised (avoiding raising), although, as with gender patterns with respect to the use of /aj/ the differences in means between the groups are small. /aj/ shows U-shaped change, with the middle generation using the most raised variants in the full data set and the elsewhere condition. /aw/, however, is an

incremental change with the youngest generation using the most raised variants. Patterns with respect to post-vocalic-R and the r-less variant show that it is the middle generation that favors the use of the dropped variant instead of the oldest generation, although at the least the oldest generation participates in the use of this variant as opposed to the youngest generation who is categorically r-ful, suggesting the shape of an upside down-J for this nearly finished change. A possible explanation as to young people's avoidance of the dropped variant of PVR is a drive towards standardization (Van Herk et al. 2009), motivated by the desire to out-migrate from the community. Residents of MDI are largely of retirement or approaching said age, and there is little appeal to the area for the younger generation in terms of career, social activity or otherwise especially in competition with urbanization. This is a similar effect as in other rural island communities such as Smith Island (Shilling-Estes and Wolfram 1995) and Newfoundland (Van Herk et al. 2009), though it is interesting to witness the younger generation categorically avoiding the dropped variant.

5.1.4. Speech Style: Labov (1972b)

Interestingly, speakers are responsive to style in the height of the /a/ nucleus of /aj/ but not that of /aw/ nor in the use of post-vocalic-R. This suggests that speakers in the community are capable of adjusting their nucleus height based on their attention to speech, suggesting this feature is available for stylistic work. Interestingly, the reading passage was the most raised followed

by the conversation style with the word list being the least raised. This finding is contra Labov's (1972a) argument that /aj/ is below the radar, and is also contra the expectation in operationalization of speech style by attention to speech that the variants should be delineated in their use by formality (conversation style, reading passage, word list). In order to control the use of these variables speakers living in MDI need to be consciously aware of their social meanings. A recent study on Appalachian English (Reed 2014) finds that locally-identified speech forms in attention-to-speech contexts are more frequent, suggesting that locals are not only aware of its local status but are also taking pride in their local identity and making use of it as an identity marker in contexts where it is salient to them.

It is surprising that no pattern concerning speech style emerges on the use of PVR, given its local status and the ability of community members to communicate about its use. Perhaps such patterns would emerge from a larger data set.

5.2. Conclusion

We observe a number of interesting social and phonological patterns with respect to the use of PVR and Raising on MDI. Capital is a major influence on the use of both features in the community, as is expected: speakers living in a community dependent on tourism are aware of their relationship to the tourist-economy on which the community is dependent, and make linguistic choices in

relationship as a result of their own relationship to this source of livelihood and who they interact with. Speakers depending on the non-local economy reinforce the image of the traditional local speaker for outsiders (both by using a local feature and avoiding adopting a non-local feature) in order to aid the tourist industry on which they are economically dependent. Only locally-dependent speakers are permitted the flexibility to introduce non-local features such as Raising into their speech. The presence of gender patterns, in addition to the presence of speech style (the ability to control the use of these factors), and in particular the noteworthy fact that /aj/ and /aw/ are not subject to the same shape of change (/aj/ is incremental while /aw/ is U-shaped) highly suggests that these two diphthongs are not changing in the same way. The patterns found with respect to Raising suggest that for younger speakers the use of this feature is socially relevant and there is a need for these speakers to adopt this feature.

6. Conclusion

This thesis discusses language variation and change on MDI through an investigation of locally-identified PVR drop and diffused Canadian Raising.

Previous work on local identity practices elsewhere did not play out as expected on MDI. The local feature of R-lessness was not used to express a local identity by the majority of residents, nor was it used to reject outsiders. In fact, in regards to the second meaning of centralization on Martha's Vineyard, the use of PVR on MDI is quite the opposite, with speakers who are dependent on the

non-local economy favouring the r-less variant in order to facilitate the creation of an enregistered image of a local resident who uses local linguistic features for the sake of outsiders. Reid (2007). These findings are similar to those on Smith Island, Maryland (Shilling-Estes and Wolfram 1999) where the local variant is also found to be in moribund status and a single social group is found to practice the local variant, although on Smith Island it was local men maintaining local identity practice and on MDI it is older women. The finding that women are maintaining the local identity is not surprising, as such a result is found elsewhere in Eastern New England (Josey 2004).

The creation of an enregistered image for outsiders was not the end of the impact of market on a speaker's linguistic choices (Bourdieu 1972, 1986, 1991). The use of Raising was found to be heavily influenced by market as well, with speakers who were dependent on the local economy found to favour the more raised variants of the /a/ nucleus. Those dependent on the non-local economy have less flexibility than their compatriots, given that their language reflects on them (and they may be evaluated negatively on its use). As a result, those who do not depend on the non-locals for their livelihood have the flexibility to introduce the contact feature to their speech. This also highlights just how unavoidable interaction with tourists is in this community; those speakers who are locally-dependent have enough contact with Canadian outsiders to introduce their speech patterns to their own. A number of gender patterns emerged,

though they were inconsistent. This suggests that the rate of change (i.e. when residents of the community adopted /aj/ and /aw/) are different, especially as men and women and the different generations are not consistently raising in similar ways and my findings do not match what is predicted by Principle II of the Principles of Change (Labov (1972b).

Several questions are left following this research. First, what is the future trajectory of Raising in the community? The residents of MDI are variably introducing Canadian Raising to their speech. However, there is no agreement socially or phonologically on how to use the feature, given that I found a wide spectrum of variation across phonological contexts and across apparent time. Future research (optimally a study in real time) will lend more insight into the trajectory of Canadian Raising on MDI, and as to whether in the future these features will show less or more variation in their use. Labov 2007 argues diffusion is always accompanied by a weakening of the original pattern. While the original pattern is observed, the rules in which it applies are extended to other phonological categories by certain social groups, and there is wide variation between social groups in who is flexible enough to raise. Future studies must examine whether this variation becomes more resolved in time.

Furthermore, why is PVR moribund? This moribund status should be confirmed by a future study. Although I find that its use is isolated to certain

social groups (Josey 2004, Shilling-Estes and Wolfram 1997, 1995) such a status must be confirmed in future study.

Another topic for future research: do other speakers living in the community (or other communities that are economically dependent on external sources), as I would hypothesize, show market effects on their use of other linguistic features? A future area of study for the present community could be to study local identity practice using a feature which is not moribund, with particular respect to its use in the younger generations, such as perhaps the backing of the vowel of the BATH lexical set or pragmatic features such as "ay-yup" used for assent (Reid 2007).

It must be noted that the results of this study concerning the use of Canadian Raising in the MDI community were limited by the small corpus size. The restricted sample used in this study may have limited the results of Rbrul's multivariate analysis. Future work on changes in such phonetic sociolinguistic variables should include a wide sample of the sociolinguistic community and a large number of tokens. Future work can also follow Boberg (2000) in his use of a threshold for what is "raised", using these differences to create cut-offs as to what counts as a "raised" quality of Hz and what does not, allowing for a traditional, non-continuous regression analysis, the output of which must be considered (against that of this project, which Rbrul considered differences in the mean Hz values produced by social groups).

Future work may benefit from a similar project with a narrower scope: to investigate these questions, but separately. It is possible that multivariate analyses were not as potent as possible in their attempts to examine such a wide range of social factors.

It will also help to investigate other non-local features to investigate whether these patterns extend beyond Raising. Given the patterns observed concerning local identity practices extend to other local features? This is another topic for other researchers in the future.

Given the patterns I have seen and their parallels elsewhere on the east coast: are there further parallels with local identity practice with this and other local and non-local features, especially with relationship to capital?

Capital plays a vital role with respect to variation in a community dependent on tourism, and speakers are capable of making the choices they need to benefit from their relationship with tourists whether the feature is locally identified or a result of contact. While a locally identified feature is at risk of death, two groups struggle to maintain its use against a younger generation driven to leave the community.

7. References

- Adank, P, Smits, R., vanHout, R. (2004). A comparison of vowel normalization procedures for language variation research. *Acoustical Society Of America*, 116 (5): 3099-3107.
- Allen, H.(1989). Canadian raising in the upper midwest. *American Speech*, 64: 74-75.
- Atkinson, P., Hammersley, M.(1994). Ethnography and participant observation. In *Handbook of Qualitative Research*. 161-248.
- Avis, W.(1954). Speech differences along the Ontario-United States border. *Canadian Journal Of Linguistics*, 1: 130-137
- Avis, W.(1961). The New England short o: A recessive phoneme. *Language* 37: 544-558.
- Bailey, G. Kile, T., Tillery, J., Sand, L.(1993). Some patterns of linguistic diffusion. *Language Variation And Change*, 5: 359-390.
- Baranowski, M.(2013). Sociophonetics. In *The Oxford Handbook Of Sociolinguistics*. Bailey, R., Cameron, R., Lucas, R. (eds). Oxford: Oxford University Press. 403-424.
- Bar Harbor chamber of commerce web site. www.barharborinfo.com. Online Resource. Last Accessed 02/01/2015.
- Becker, K.(2014). (r) we there yet? The change to rhoticity in New York City English. *Language Variation And Change*, 26(2): 141-168.
- Bell, A.(1984). Language style as audience design. *Language*, 13: 145-204.
- Blake, R., Josey, M. (2003). The /ay/ diphthong in a Martha's Vineyard community: What can we say 40 years after Labov? *Language In Society*, 32(4): 451-485.
- Boberg, C.(2000). Geolinguistic diffusion and the U.S.-Canada border. *Language Variation And Change*, 12(1): 1-24.
- Boberg, C.(2008). Phonetic differentiation in Standard Canadian English. *Journal Of English Linguistics*, 36(2): 129-154.
- Boersma, P., Weenik, D.(2015). Praat: Doing phonetics by computer.
- Bourdieu, P.(1972). The economics of linguistic exchanges. *Social Sciences Information*, 16(6): 645-668.
- Bourdieu, P.(1986). The forms of capital. In Handbook of theory and research for the sociology of education. Richardson, J. (ed). New York: Greenwood: 241-258.
- Bourdieu, P.(1991). Language and symbolic power. Harvard University Press.
- Britain, D.(1997). Dialect contact and phonological reallocation: 'Canadian Raising' in the English Fens. *Language In Society*, 26: 15-46.
- Bucholtz, M.(1999). "Why be normal?:" Language and identity practices in a community of nerd girls. *Language In Society*, 28: 203-223.
- Burnett, W.(2006). Linguistic resistance at the Maine-New Brunswick border. *The Canadian Journal Of Linguistics* 51(2, 3): 161-175.

- Callary, R.(1975). Phonological change and the developement of an urban dialect in Illinois. *Language in Society*, 4: 115-169.
- Chambers, J.K(1973). Canadian Raising. *Canadian Journal Of Linguistics*, 18: 113-135.
- Chambers, J.K.(2002). Patterns of variation including change. In The handbook of language variation and change: 358-381.
- Childs, B. DeDecker, P., Deal, R., Kendall, T., Thorburn, J.(2010). Stop signs: The intersection of interdental fricatives and identity in Newfoundland. *University Of Pennsylvania Working Papers In Linguistics*, 16(2): 24-35.
- Clarke,S., Elms,F., Youssef,A.(1995). The third dialect of English: Some Canadian evidence. *Language Variation and Change*, 7: 209-228
- Clarke, S.(2006). Nooz or Nyooz?: The complex construction of Canadian identity. *Canadian Journal Of Linguistics*, 51(2, 3): 225-246.
- Cutler, C.(1999). Yorkville Crossing: White teens, hip-Hop and African American English. *Journal Of Sociolinguistics*, 3(4): 428-442.
- Dailey-O'Cain, J.(1997). Canadian Raising in a midwestern U.S. city. *Language Variation And Change*, 9: 107-120.
- DiPaolo, M., Yeager-Dror, M.(2011). Sociophonetics: A Student's Guide. London, UK: Routledge.
- Ellis, M., Groff, C., Mead, R.(2006). A rapid and anonymous study of /r/ vocalization in an /r/ pronouncing city. *University Of Pennsylvania Working Papers In Linguistics*, 12(1): 57-67.
- Evanini, K. (2009). The permeability of dialect boundaries: A case study of the region surrounding Erie, Pennsylvania. PhD. Dissertation, University Of Pennsylvania.
- Feagin, C.(1998). Real time change in Alabama English: When speakers leave the community. Paper presented at NWA V, 27: Athens, GA.
- Gal, S.(1978). Peasant men can't get wives: Language change and sex roles in a bilingual community. *Language In Society*, 7: 1-16.
- Google Maps. google.maps.ca. Online Resource, accessed 02/01/15.
- Hillenbrand, J., Getty, L.A., Clark, M.J., Wheeler, K.(1995). Acoustic analysis of American English vowels. *Journal Acoustical Society Of America*, 97: 3099-3111.
- Hoswell, J.(1972). Hard living on clay street: Portraits of blue collar families. Prospect Heights, Illinois: Waveland Press. 392-403.
- Inoue, F.(2010). Gravity model of diffusion for Tokyo and new dialect forms. *Working Papers In Linguistics And Phonetics*, 15: 92-100.

- Irwin, P., Nagy N.(2007). Bostonians /r/ speaking: A quantitative look at (R) in Boston. *University Of Pennsylvania Working Papers In Linguistics, Selected Papers From NWAV 35*(13,2): 135-147.
- Johnstone, B.(2011). Dialect enregisterment in performance. *Journal Of Sociolinguistics*, 15(5): 657-679.
- Johnson,E.(2009). Getting off the Goldvarb standard: Introducing Rbrul for mixed-effects variable rule analysis. *Language And Linguistics*, (3/1): 359-383.
- Johnson,E.(2015). Personal contact.
- Josey, M.(2004). A sociolinguistic study of phonetic variation on Martha's Vineyard. PhD Dissertation, New York University: New York, NY.
- Kendall, T., Thomas, E.(2007). NORM: The vowel normalization and plotting suite. Online resource: <http://ncslaap.lb.ncsu/tools/norm/>. Accessed 01/06/15.
- Kendall, T., Kretzchmar, W., Thomas,E., Yeager-Dror, M.(2007). Two things sociolinguists should know: Software packages for vowel normalization, and accessing linguistic atlas data. Workshop at New Ways of Analyzing Variation. NWAV 36.
- Kostakis, A.(2010). Sociolinguistic evidence for output-output constraints. *Lingua*, 120: 2476-2496.
- Kurath,H.(1939). Handbook of the linguistic geography of New England. Providence, RI: Brown University.
- Kurath,H.(1943).Linguistic atlas of new england. Providence, RI: Brown University.
- Kurath,H., McDavid,R.I.(1961). The pronunciation of English in the Atlantic States. Ann Arbor, MI: University of Michigan Press.
- Labov, W.(1963). The social motivation of a sound change. *Word*, 19: 273-309.
- Labov, W.(1966). The social stratification of (r) in New York City. In Sociolinguistic Patterns. Labov, W. (ed), University Of Pennsylvania Press: Philadelphia, PA: 43-70.
- Labov, W.(1972a). The social motivation of a sound change. In Sociolinguistic Patterns. Labov, W. (ed.), University Of Pennsylvania Press: Philadelphia, PA: 1-41.
- Labov, W.(1972b). Some principles of linguistic methodology. *Language In Society*, 1(1): 97-120.
- Labov, W.(1972c). Sociolinguistic Patterns. University Of Philadelphia Press: Philadelphia, PA.
- Labov, W.(1984). Field methods of the project on linguistic change. In Language in use, Baugh, J., Sherzer, J. (eds.), Englewood Cliffs: Prentice Hall. 1-51.
- Labov, W.(2007). Transmission and diffusion. *Language*, 83(2): 344-387.
- Labov,W., Ash,S., Boberg,C.(2006).Atlas of North American English: Phonology and sound change.

- Laferriere, M. (1977). Boston short a: Social variation as historical residue. In Fasold and Shuy (eds.), 100-107.
- Lane, L. (2000). Ethnodialectology: Dialects and the (re-)construction of identities. *American Speech*, 75, 4: 352-354.
- Lewis, G., Sample, T. (1986). How to talk Yankee. Thorndike, ME: Thorndike Press.
- Lobanov, B.M. (1971). Classification of Russian vowels spoken by different speakers. *Journal Of Acoustic Society Of America*, 49: 2114-2134.
- Meyerhoff, M., Niedzielski, N. (2003). The globalization of vernacular variation. *Journal Of Sociolinguistics*, 7(4): 534-555.
- Michnowicz, J. (2012). The standardization of Yucatan Spanish: Family case studies in Izamal and Mérida. *Selected Proceedings Of The 7th Hispanic Linguistics Symposium*. Kimberly, G., Díaz-Campos, M. (eds.): Somerville, MA: 102-115.
- Miller, C. (1989). The United States-Canadian border as a linguistic boundary: The English language in Calais, Maine and St. Stephen, New Brunswick. Undergraduate Honors Thesis. Harvard University: Cambridge, MA.
- Milroy, J., Milroy, L. (1978). Belfast: Change and variation in an urban vernacular. In Sociolinguistic patterns in British English. Trudgill, P. (ed.). London: E. Arnold: 19-36.
- Milroy, L. (1987). Language and social networks. New York, NY: Blackwell.
- Milroy, L. (2000). Social network analysis and language change: Introduction. *European Journal Of English Studies*, 4(3): 217-223.
- Nagy, N. (2001). Live free or die as a linguistic principle. *American Speech*, 76(1): 30-41.
- Nagy, N., Roberts, J. (2004). New England phonology. In A handbook of varieties of English Volume 1: Phonology. Mouton de Gruyter: 270-281.
- Peng, F. (1982). Sex-differentiation in language variation: A sociolinguistic contribution to the language sciences. *Language Sciences*, 4(2): 131-154.
- Poplack, S. (1993). Variation theory and language contact. In Variation theory and language contact: American dialect research. Preseton, D. (ed.). Philadelphia, PA: John Benjamins: 251-286.
- Pope, J. (2007). Forty years of language change on Martha's Vineyard. *Language*, 83(3): 615-627.
- Prince, A., Smolensky, P. (1993). Optimality Theory: Constraint interaction in generative grammar. Rutgers University: University of Colorado at Boulder.
- Reed, P. (2014). The realization of raising pitch as a socio-pragmatic identity marker in Appalachian English. *New Ways Of Analyzing Variation Conference*, 43. Chicago, IL.

- Reid, L.(2007). English in Maine: The mythologization and commodification of a dialect. Online Source.
<http://homes.chass.utoronto.ca/~cpercy/courses/eng6365~reid.htm> Retrieved 12/11/13.
- Roberts, J.(2007). Vermont lowering? Raising some questions about /ai/ and /au/ south of the Canadian border. *Language Variation And Change*, 19: 181-191.
- Sankoff, D., Laberge, S.(1978). The linguistic market and the statistical explanation of variability. In *Linguistic variation: Models and methods*. Sankoff, D. (ed.): 239-250.
- Sankoff, D., Tagliamonte, S., Smith, E.(2005). Goldvarb X: A variable rule application for Macintosh and Windows. (computer software). Joint Effort Department Of Linguistics, Toronto, ON: University Of Toronto. Department of Mathematics and Statistics University of Ottawa. Ottawa, ON.
- Sankoff, D., Tagliamonte, S., Smith, E.(2015). Goldvarb Yosemite: A multivariate analysis application for Macintosh. A joint effort: Department of Linguistic, Toronto, ON: University of Toronto. Department of Mathematics and Statistics, University of Ottawa. Ottawa, ON.
- Shilling-Estes,N., Wolfram, W.(1995). Moribund dialects and the endangerment canon: The case of the Ocracoke Brogue. *Language*, 71: 696-721.
- Shilling-Estes,N.(1999). Reshaping economies, reshaping identities. Gender-based patterns of language variation in Ocracoke English. Paper presented at the fifth annual meeting, *Berkley Women And Language Conference*, presented by the Berkely Women and Language Corp.
- Shilling-Estes, N., Wolfram, W.(1999). Alternative models for dialect death: Dissipation vs. concentration. *Language*, (75,3): 486-521.
- Leddy-Cecere, T., Baclawski, K., Walker, N., Stanford, J., (2012). New England borderlands: A new investigation of the East-West boundary. *University Of Pennsylvania Working Papers In Linguistics*, 17(2): 119-153.
- Tagliamonte, S.(2006). Analyzing sociolinguistic variation. Edinburg, UK: Cambridge University Press.
- Tagliamonte,S., Denis.D.(2008). Linguistic ruin? LOL! Instant messaging and teen language. *American Speech*, 38,1: 3-34.
- Tagliamonte, S., D'Arcy, A.(2009). Beyond phonology: Adolescence, incrementation and change. *Language*, 85(1): 58-108.
- Thomas, E.(1991). The origin of Canadian Raising in Ontario. *Canadian Journal of Linguistics*, 36: 147-170.
- Vance, T.(1987). "Canadian Raising" in some dialects of Northern United States. *American Speech*, 62: 195-210.

- Van Herk, G., Childs, B., Thorburn, J.(2009). Identity marking and affiliation in an urbanizing Newfoundland community. *Papers From The 31st Annual Meeting Of The Atlantic Provinces Linguistic Association*: 85-94.
- Weaver, R.(2000). Acoustic features of /r/: Variation in African American Vernacular English speaking children and adults of the mid-south. PhD Dissertation: University of Memphis.
- Wolfram, W., Shilling-Estes, N.(1995). Moribund dialects and the endangerment canon: The case of the Ocracoke Brogue. *Language*, 71: 696-721.
- Wolfram, W., Shilling-Estes, N.(1996). Dialect change and maintenance in a post-insular community. In Focus On The USA: Varieties Of English Around The World. Volume 16, Schneider, W (ed.): 103-148.
- Wolfram, W.(1997). Hoi toide on the Outer Banks: The story of the Ocracoke Brogue. University Of North Carolina Press
- Wasserstein,R.(2016). American statistical association releases statement on statistical significance and p-values. *American Statistical Association News*, amstat.org visited 7/6/16.

8. Appendices

Appendix A. Informed Consent forms

A1. Two-Party Informed Consent Form

Informed Consent Form

Project Title: Cross-roads at the linguistic market: Post-vocalic-R and Canadian raising on Mount Desert Island.

Researcher: Pr. M.J. Antiqua-Parlee
 M.A. Candidate
 Department of Linguistics
 Memorial University of Newfoundland
 27 Gray Farm Road
 Mount Desert, ME 04660
 Cell: (207) 664-9624
 Day: (207) 244-3094
 E-Mail: mjf802@mun.ca

You are invited to take part in a research project entitled " Cross-roads at the linguistic market: Post-vocalic-R and Canadian raising on Mount Desert Island." This form is part of the process of informed consent. It should give you the basic idea of what the research project is about and what your participation will involve. It also describes your right to withdraw from the study at any time. In order to decide whether you wish to participate in this research study, you understand enough about its risks and benefits to be able to make an informed decision. This is the informed consent process. Take time to read this carefully and to understand the information given to you. Please contact the researcher, M.J. Antiqua-Parlee, if you have any questions about the study or for more information not included here before you consent.

It is entirely up to you to decide whether to take part in this research. If you choose not to take part in this research or if you decide to withdraw from the research once it has started, there will be no negative consequences to you, now or in the future.

Introduction

My name is M.J. Antiqua-Parlee. I am an M.A. student studying linguistics at Memorial University of Newfoundland. As part of my Master's thesis, I am conducting sociolinguistics research under the supervision of Dr. Gerard Van Herk. Previous work in other coastal communities in this region (Martha's

Vineyard) has shown that in response to summer visitors and a dependence on a tourism economy, locals make use of local speech features as a marker of local identity. My own work is similarly interested in how life-long residents of Mount Desert Island make use of local speech as a marker of local identity in response to the tourism industry that supports the local economy.

Purpose of Study

The chief objective of this study will be to describe how the English language is used on Mount Desert Island. Previous research on linguistics in this community is limited; this study aims to help fix this problem by adding a study to the academic literature that describes how language is spoken in the community today. Based on the data I will collect; my other objectives will be to answer a number of questions surrounding how language is used in this community today, its use in the past and its trajectory for the future. These questions include: Do summer visitors have an effect on local speech? Do locals use regional speech features to be "local"? Which sound features count as local?

What You Will Do in This Study

In this study, you will be asked to engage in a variety of tasks. Each task's instructions will be explained to you during the interview. I will first ask you for demographic and information about yourself for a social context for your data in the study. For the second task you will read a word list. I've printed the words on index cards and I will present them to you. You will be asked to read them out loud. I will then shuffle the list and ask you to read the list a second time. After you complete this task, I will present you with a reading passage to read out loud. Following this, we will have a conversation although the focus of this conversation is intended to be you. I will be asking you some questions intending to get you to talk about yourself and experiences that you are comfortable discussing or any topics of interest. After about 45 minutes or so of talking, we will conclude the interview.

Length of Time:

Your participation will be asked for approximately 1.5 hours to complete this interview.

Withdrawal from This Study:

Your participation in this study is entirely voluntary and you are free to withdraw at any time, until the thesis has been submitted for final approval (circa August 2016).

*Please contact the primary researcher if you wish to stop/end your involvement with this project. If you wish to end the interview, please let me know during the interview and we will stop.

*If you decide to withdraw, written and recorded data that you have provided will be immediately destroyed.

*There is no consequence for withdrawing from this study.

Possible Benefits:

As a participant in this study, you will be helping to expand the academic literature by adding a study on a new community (your own: Mount Desert Island) and variety of English that has not yet been documented. You will also help expand the academic literature on how English is spoken in the region of Eastern New England, coastal communities, and communities which depend on a tourist economy. You will be helping to expand knowledge on how the mechanism of dialect contact functions, specifically in situations where there are many dialects in contact with the speakers of community for both a short period of time and also where some speakers of non-local dialects become residents themselves and prolong contact. You will also add to the sociolinguistic literature on how local identity is practised in speech communities, and how various social factors affect language change.

Possible Risks:

There are no foreseeable risks to your participation in this study.

Confidentiality Vs. Anonymity:

There is a difference between confidentiality and anonymity: confidentiality is ensuring that identities of participants are accessible only to those authorized to have witness. Anonymity is a result of not disclosing a participant's identifying characteristics (such as name or description of physical appearance)

Confidentiality and Storage Of Data:

The protection of any personal information that is volunteered during this study is a primary concern of the researcher in sociolinguistic field work. All reasonable measures possible (detailed below) will be taken to ensure that your identity remains secure and confidential for the duration of the project and will not be at risk after the project's termination. All data will be retained for a minimum of five years, as required by Memorial University policy on Integrity in Scholarly Research. This protocol applies regardless of whether or not you agree to permanent storage at the Sociolinguistics Laboratory.

Written materials (consent forms, questionnaire answers, demographic survey) will be stored in a locked filing cabinet at my residence to which I have sole access. Recorded audio data from this interview will be stored on my external hard drive, and will be encrypted using Kaspersky Anti-Virus software.

Following this procedure, the recorded data can only be accessed by myself using a password that I have created for your data. This data will be stored on this drive until January 1, 2016 at which time the project is expected to be completed. I will, with your consent, donate your recorded data to the Memorial University of Newfoundland Sociolinguistics Laboratory for permanent storage from this date on to allow other linguistics students to use the data for their studies. Use of this data will be strictly subject to the Laboratory's confidentiality protocols, to ensure that your identity is protected in future analyses and/or publications that result from this data.

Anonymity:

Every reasonable effort, according to TCPS2 guidelines has been made to assure you of the protection of anonymity in this study and the protection against revealing identifying information. In all publications of analytical material; I will label participants using a numerical code based on the date interviewed.

Participants will never be identified using personal information in publications. When using quotations in publications, any identifying information (such as names) will be replaced with a capital letter.

Recording of Data:

Participation in this interview will involve the recording of your speech using an M Audio Track III recording device. There will be check-boxes below for you to indicate if you wish to agree to be recorded or not. You are entitled to request the deletion of any recorded material you provide, in whole or in part, at any time.

Reporting of Results:

The data collected from interviews will be analyzed and used as part of the program requirements of my Master's Degree (thesis). This work will also be disseminated to a number of academic journals in linguistics including: American Dialect Society, Canadian Linguistic Association, Journal of Sociolinguistics.

Sharing of Results with Participants:

At the conclusion of this interview I will ask for contact information in order to follow-up with you concerning the results of this project once it is completed. I will also provide you with my contact information should you have any feedback to provide. I will at that time provide you with directions on how to obtain copies of the results or the study itself.

Questions:

You are welcome to ask questions at any time during your participation in this research. If you would like more information about this study, please contact M.J. Antiqua-Parlee using the e-mail address mjf802@mun.ca. If there are questions that cannot be answered by the primary researcher or you would like to speak to the project supervisor, please e-mail Dr. Gerard Van Herk at gvanherk@mun.ca

The proposal for this research has been reviewed by the Interdisciplinary Committee on Ethics in Human Research (ICEHR) and found to be in compliance with Memorial University's ethics policy. If you have ethical concerns about the research (such as the way that you have been treated or your rights as a participant), you may contact the Chairperson of the ICEHR at iceher@mun.ca or by telephone at (709)-864-2861.

Consent:

Your signature on this form means that;

- *You have read the information about the research
- *You have been able to ask questions about this study
- *You are satisfied with the answers to all of your questions.
- *You understand what the study is about and what you will be doing.
- *You understand that you are free to withdraw from the study at any time, without having to give a reason, and that doing so will not affect you now or in the future.
- *You understand that any data collected from you up to the point of your withdrawal will be destroyed.

If you sign this form, you do not give up your legal rights and do not release the researcher from his professional responsibilities.

Your Signature:

I have read what this study is about and understand the risks and benefits. I have had adequate time to think about this and have had the opportunity to ask questions and my questions have been answered.

☐ I agree to participate in the research project understanding the risks and contributions of my participation, that my participation is voluntary, and that I may end my participation at any time.

☐ I agree to be audio-recorded during the interview.

☐ I do not agree to be audio-recorded during the interview.

☐ I agree to the use of quotations and/or speech transcriptions using capital letters for names.

☐ I agree to the use of quotations and/or speech transcriptions, but I do not want capital letters for names used.

☐ I do not agree to the use of quotations and/or speech transcriptions.

☐ I agree to permanent storage at the Memorial University Sociolinguistics Laboratory.

A copy of this Informed Consent Form has been given to me for my records.

Signature of Participant

Date

Researcher's Signature

I have explained this study to the best of my ability. I invited questions and gave answers. I believe that the participant fully understands what is involved in being in the study, any potential risks of the study and that he or she has freely chosen to be in the study.

Signature of Principal Investigator

Date

A2. Three-Party Informed Consent Form

Third-Party Informed Consent Form

Project Title: Cross-roads at the linguistic market: Post-vocalic-R and Canadian raising on Mount Desert Island.

Researcher: Pr. M.J. Antiqua-Parlee

M.A. Candidate

Department of Linguistics

Memorial University of Newfoundland

27 Gray Farm Road

Mount Desert, ME 04660

Cell: (207) 664-9624

Day: (207) 244-3094

E-Mail: mjf802@mun.ca

I have invited your son/ daughter to take part in a research project titled " Cross-roads at the linguistic market: Post-vocalic-R and Canadian raising on Mount Desert Island.

This form is a part of the process of informed consent. It should give you and your son/ daughter a basic idea of what the research project is about and what your son/ daughter's participation will involve. It also describes your son/ daughter's rights to withdraw from the study at any time, as well as your right and your right to withdraw your son/ daughter from the study at any time. In order to decide whether or not you wish for your son/ daughter to participate in this research for your son/ daughter to decide whether or not they wish to participate in this research; both you and your son/ daughter you should understand enough about its risks and benefits to make an informed decision.

This is the informed consent process. Take time to read carefully and understand the information given to you. Please contact the researcher, M.J. Antiqua-Parlee, if you or your son/ daughter have any questions about the study or for more information not included here before you consent.

It is the mutual decision of you and your son/ daughter to decide whether or not your son/ daughter takes part in this research. If you, or your son/ daughter chooses not to take part in this research or if either of you chooses to withdraw before it is finished there will be no negative consequences to you, now or in the future.

Introduction

My name is M.J. Antiqua-Parlee. I am an M.A. student studying linguistics at Memorial University of Newfoundland. As part of my Master's Thesis, I am conducting sociolinguistics research under the supervision of Dr. Gerard Van Herk. Previous work in other coastal communities in this region (e.g. Martha's

Vineyard) has shown that in response to summer visitors and a dependence on tourism economy; locals make use of local speech features as a marker of local identity. My own work is similarly interested in how residents of Mount Desert Island use local speech as a marker of local identity in response to the tourism industry that supports the local economy.

Purpose of Study

The chief objective of this study will be to describe how the English language is used on Mount Desert Island. Previous research in this community is limited; this study aims to help fix this problem by adding a study to the academic literature that describes how language is spoken in the community today. Based on the data that I collect, my other objectives will be to answer a number of questions surrounding how language is used in the community today, its use in the past and its trajectory for the future. Among these questions are: do summer visitors have an effect on local speech? How do locals use regional speech features to be "local"? Which features count as local?

What Your Son/Daughter Will Do in This Study

In this study, your son/daughter will be asked to engage in a variety of tasks, which will be recorded using an M-Audio Track III recorder. The tasks include: asking your son/daughter a number of demographic questions to provide a context to the data (e.g. age, gender, where they grew up). Second, I present a word list printed on index cards to your son/daughter and ask them to read it out loud, twice. Third, I will ask your son/daughter to read a short story out loud that I prepared. Finally, we will have a conversation about issues, experiences and topics of interest to your son/daughter (I will facilitate this conversation, allowing them to lead the conversation).

Length of Time

Your son/daughter will be asked to participate for approximately 1-2 hours.

Withdrawal from This Study

Your son/daughter's participation in this study is entirely voluntary and s/he is free to withdraw at any time, until the thesis has been submitted for final approval in August 2016. You, as the legal guardian proffering legal consent, have authority to withdraw your son/daughter from the study.

*Please contact the primary researcher if you or your son/daughter wish to stop/end involvement with this project. If your son/daughter or you wish to end the interview, please let me know at any time during the interview and we will stop.

*If you or your son/daughter decides to withdraw, written and recorded data that your son/daughter may have provided will be immediately destroyed.

*There is no consequence to you or your son/daughter for withdrawing from this study.

Possible Benefits

As a participant in this study, your son/ daughter will be helping to expand the academic literature by adding a study on a new community (Mount Desert Island) and a new variety of English which has not yet been documented. They will also help expand the academic literature on how English is spoken in the region of Eastern New England, in coastal communities and communities depending on a tourist economy. They will help to expand our knowledge on how the mechanism of dialect contact functions. They'll help to add to our knowledge on how language is used to express local identity, and how language is socially impacted. Also, if your son or daughter currently attends Mount Desert High School they'll be eligible for community service credit for participation in this study.

Possible Risks

There are no foreseeable risks to your participation in this study.

Confidentiality Vs. Anonymity

There is a difference between confidentiality and anonymity. Confidentiality is ensuring that identities of participants are accessible only to those authorized to have witness. Anonymity is a result of not disclosing participant's identifying characteristics (such as name or description of physical appearance).

Confidentiality and Storage Of Data

The protection of any personal information that is volunteered during this study is a primary concern of the researcher in sociolinguistic field work.

All reasonable measures possible (detailed below) will be taken to ensure that your son/ daughter's identity remains secure and confidential for the duration of the project and will also not be at risk after the project's termination. All data will be retained for a minimum of five years, as required by Memorial University policy on Integrity in Scholarly Research. This protocol applies regardless of whether or not you agree to permanent storage at the Sociolinguistics laboratory. Written materials (consent forms, questionnaire answers, surveys) will be stored in a locked filing cabinet at my place of residence to which I have sole access. Recorded audio data from the interview will be copied to my encrypted external hard drive. The original source, the SD card in the recorder, will be formatted following this transfer. Following this procedure, the recorded data will only ever be accessible by the person knowing the password to this drive: myself. The data will be stored there until August 30, 2016 at which time the project is expected to be completed. At that time, with your consent, I will donate your recorded data to the Memorial University of Newfoundland Sociolinguistics Laboratory for permanent storage from that date forward to allow other linguistics students to use the data for their studies. Use of this data will be subject to the Laboratory's confidentiality protocols to ensure that your son/ daughter's identity is protected even in future analysis/ publications that result from this data.

Anonymity

Every reasonable effort, according to TCPS2 guidelines has been made to assure you and your son/daughter's of their protection of anonymity in this study and the protection against revealing identifying revealing information. In all publications and analysis materials, I will label participants using a numerical code based on the date they were interviewed. Participants will never be identified using personal information in publications. When using quotations in publications, any identifying information (such as names) will be replaced with capital letters.

Recording of Data

Participation in this interview will involve the recording of your son/daughter's speech using an M Audio III recording device. There will be check-boxes below to indicate if you wish to agree to be recorded or not. You, and/or your son/daughter are entitled to request the deletion of any recorded material that is provided, in whole or in part, at any time.

Reporting Of Results

The data collected from interviews will be analyzed and used as part of the program requirements of my Master's Degree Thesis. This work will be disseminated to a number of academic journals in linguistics including: American Dialect Society, Canadian Linguistic Association, Journal of Sociolinguistics.

Sharing of Results With Participants

At the conclusion of the interview I will ask for contact information in order to follow-up with you concerning the results of this project once it is completed. I will provide you with my contact information should you or your son/daughter have any feedback to provide. I will at that time provide you with directions on how to obtain results of the results or with the study in whole.

Questions

You are welcome to ask questions at any time during your son/daughter's participation, and your son/daughter is welcome as well to ask questions. If you would like more information about this study, please contact M.J. Antiqua-Parlee using the e-mail address mjf802@mun.ca. If there are questions that cannot be answered by the primary researcher or you would like to speak to the project supervisor, please e-mail Dr. Gerard Van Herk at gvanherk@mun.ca

The proposal for this research has been reviewed by the Interdisciplinary Committee on Ethics in Human Research (ICEHR) and found to be in compliance with Memorial University's ethics policy. If you have ethical concerns about the research (such as the way that you have been treated or your rights as a participant), you may contact the Chairperson of the ICEHR at icehr@mun.ca or by telephone at (709)-864-2861.

Consent

Your signature on this form means that;

*You and your son/daughter have read the information about the research.

*You and your son/daughter have been able to ask questions about this study.

*You and your son/daughter are satisfied with the answers to all of your questions.

*You and your son daughter understand what the study is about; you both understand what it is that your son/daughter will be doing.

*You understand that you or your son/daughter are free to withdraw from the study until the thesis has been submitted, without giving a reason, and doing so will not affect you now or in the future.

*You understand that any data collected from you up to the point of withdrawal will be destroyed.

If you and your son/daughter sign this form, you do not give up your legal rights and do not release the researcher from his professional responsibilities.

Signature 1: Guardian Signature

I have read what this study is about and understand the risks and benefits to my child. I have had adequate time to think about this and have had the opportunity to ask questions and my questions have been answered; I give permission for my child to participate in this study.

☐ I agree that my child's participation is voluntary, and that participation may end at any time.

☐ I agree to have my child be audio-recorded during the interview.

☐ I do not agree to have my child be audio-recorded during the interview.

☐ I agree to the use of quotations and/or speech transcriptions of my child's data using capital letters for names.

☐ I agree to the use of quotations and/or speech transcriptions of my child's data, but I do not want capital letters for names used.

☐ I do not agree to the use of quotations and/or speech transcriptions.

☐ I agree to permanent storage at the Memorial University

Sociolinguistics Laboratory.

A copy of this Informed Consent Form has been given to me for my records.

Signature Of Legal Guardian

Date

Signature 2: Participant

I have read what this study is about and understand the risks and benefits. I have had adequate time to think about this and have had the opportunity to ask questions and my questions have been answered.

☐ I agree to participate in the research project understanding the risks and contributions of my participation, that my participation is voluntary, and that I may end my participation at any time.

☐ I agree to be audio recorded during the interview.

☐ I do not agree to be audio recorded during the interview.

☐ I agree to the use of quotations and/or speech transcriptions using capital letters for names.

☐ I agree to the use of quotations and/or speech transcriptions, but I do not want capital letters for names used.

☐ I do not agree to the use of quotations and/or speech transcriptions.

☐ I agree to permanent storage at the Memorial University

Sociolinguistics Laboratory.

A copy of this Informed Consent Form has been given to me for my records.

 Participant

 Date
Researcher's Signature

I have explained this study to the best of my ability. I invited questions and gave answers. I believe that the participant and legal guardian of the participant both fully understand what is involved with being in the study, any potential risks of the study and that s/he has freely chosen to be in the study and the guardian has freely permitted them to do so.

 Principal Investigator

 Date

A3. Confidentiality Waiver and Affidavit

Confidentiality/Anonymity Waiver and Affidavit

This document is an agreement between yourself, a participant in my research study, " Cross-roads at the linguistic market: Post-vocalic-R and Canadian raising on Mount Desert Island.", your legal guardian, and myself (the primary researcher of said study) that I, M.J. Antiqua--Parlee, as the primary researcher, have permission to contact your current education establishment (Mount Desert Island High School) and disclose the following information concerning our interview.

*First, that you participated a full hour in this study (in other words, you completed an interview with me).

*Second, I will disclose your name to your school and that you participated in this study. This is the only personal information I will disclose to your school.

You understand that this information will be shared only with your institution of learning; and will be shared only with the senior administrative staff. You understand that this information is shared with these persons so that you can receive credit towards your community service hours required for graduation. You also understand that this waiver will only be used to allow the primary researcher permission to disclose this information for the purpose of proffering you credit for community service hours: all other protections of your anonymity and confidentiality are taken seriously, and every action possible is still taken to ensure that your identity will be protected.

By signing below, you (the participant) and your legal guardian offer permission to contact your school for the purposes outlined above, and to offer the information about you outlined above, and you are aware that your confidentiality and anonymity is of the utmost concern to this study.

Signature of Participant

Signature of Legal Guardian

Signature of Primary Researcher

Date

Appendix B. Interview Materials

B1. Demographics Questionnaire

1. What is your gender identification?
2. What year were you born in?
3. Where did you last go to school?
- 3a. Did you end up finishing?
4. Where do you consider your current place of residence?
- 4a. Where do you consider the place where you were born and brought up?
5. How much of your childhood did you spend there?
- 5a. Do you still live there?
- 5b. *Have you travelled or lived off the island for an extended period of time?
- 5c. For what purposes?
- 5d. When did you go, and where did you go?

B2. Social Networks and Capital Questionnaire

Social Networks Questionnaire

1. What is your occupation/line of work?
- 1a. Thinking on these activities; would you say your co-workers/fellow students are more or less from the island?
- 1b. Do you have a summer job?
- 1c.. During the summer, at your place of work, does it get busier?
- 1d. Do tourists visit with or associate with the people you know at work?
- 1e. Is it part of your job description to talk to tourists? Do you enjoy it?
- 1f. Do you consider tourists an important part of your career?
2. Do you feel that your friends/family interact with tourists on a regular basis?
- 2c. If you could hazard a guess, what would you say other people's opinions on tourists who interact with you (such as friends, family, coworkers).
3. Consider your recreational activities. What are they, and why?
- 3a. Do the people you enjoy your recreational activities with, if anyone, associate with summer people/tourists during the summer months?
- 3b. Do you associate with new people when you enjoy your hobbies during the summer? What kinds of people? How about during other seasons?
4. How do you feel about businesses that cater to tourists here on the Island?
- *What is your general opinion on tourism on Mount Desert Island?
- 4b. In your travels (if you have), did you establish any long-term contacts? Who, and where?

B3. Word List

Item No.	Word
1	Diaper
2	Doubt
3	Joke
4	Biding
4	Internet Browser
5	Lids
6	Microphone
7	Snout
8	Nautical Mile
9	Mile
10	Noun
11	Mayday
12	Stereotype
13	House
14	Crickets
15	Tidying-Up
16	Power
17	College
18	Sigh
19	Cow
20	Pay
21	Lie
22	Vow
23	Raw
24	Timing
25	Sound
26	Sunk Ship
27	Wine
28	Lounge
29	Bane
30	Ice
31	Out
32	Aisle
33	Owl
34	Nor'Easter

35	University Of Maine Black Bears
36	Castaway
37	Car
38	Bar Harbor Chamber Of Commerce
39	Peer Pressure
40	Fear
41	Core
42	Park Loop Road
43	Red Barn
44	Years
45	Beers
46	Course
47	Boston Red Sox
48	Carry
49	Soaring

B4. Reading Passage

My son Ike and I used to take a trip together every July when he was on summer vacation from high school and I got a break in my schedule from work. This summer we went to Mount Desert Island; home of Bar Harbor and some beautiful coastline (and we heard some of the world's best clam chowder!) Ike's always loved these trips, but this year when we carried supplies to the car for the long haul up Interstate-95 from our house in North Carolina. My son's lousy attitude towards me was cold as ice - he made a vow before we left not to have any fun, upset at being separated from his friends for four months. The entire car ride, he made good on that promise - keeping silent with a sour expression only letting out the occasional sigh. I was thinking as I steered the car closer to

our destination that this trip wasn't the best of ideas; my 16-year old had likely out-grown time with his father.

When we arrived at our campsite just a few miles outside Bar Harbor proper, my son's disposition suddenly changed as he noted the island's gorgeous natural scenery. We set up camp for the night, although he urged me to explore immediately. It took a lot of effort on my part to explain to him that going out in the twilight might not suit city-folk from the south like us. So we went to bed after the campfire burned out; anxiously waiting for the next day when our adventure here could really start. It was uneventful that night; except for the crying of a loon and hooting of an owl; sounds unfamiliar to my boy that surprised him out of sleep and had him asking all sorts of questions! His excitement was beginning to boil, and I was happy.

The next day we set off for Flying Mountain. Our travel guide book said it was a fairly easy hike - indeed, the sign at the base of the trail said about a mile distance up. As we began our climb, it proved to be more of a challenge than we thought, especially for our untrained legs but the two of us were determined to make the summit.

Now when we reached the summit; both of us were in awe of how gorgeous it was. As we gazed at the sight below, Ike's arm rested on my shoulder in comfort and he said: "Incredible. A sniper could make his mark on even a mouse sitting on the roof of a house from here, or on any of the fish swimming in

the water! It's like being a soaring bird!" The next thing he shared with me, though; meant more to me than any words anyone has ever told me before: "Thanks for taking me here. It's great to look at the world with the greatest guy in it!" So thank you, Mount Desert Island - my time spent here with my son has brought me closer to the most important young man in my life.

Appendix C. Recruitment Materials

C1. Poster

TWO SEASONS; TOURISTS OR SNOW?

OR...

WHAT DO ISLANDERS DO TO BE "ISLANDERS"?

*Want to Help A Local Linguist Discover The Truth Of Local Linguistic Identity On
MDI?*

Contact Me for Details or to Participate!

Email: mjf802@mun.ca
Land Line (9-5 M-F): 244-3094
Cell: 664-9624
Facebook: M.J. Antiqua-Parlee

The proposal for this research has been reviewed by the Interdisciplinary Committee on Ethics in Human Research (ICEHR) and found to be in compliance with Memorial University's ethics policy. If you have ethical concerns about the research (such as the way that you have been treated or your rights as a participant), you may contact the Chairperson of the ICEHR at iceher@mun.ca or by telephone at (709)-864-2861.

C2. Script – E-Mail Recruitment Script

Recruitment Script

Greetings sir/ madam,

My name is M.J. Antiqua-Parlee, and I am a Master's degree candidate at Memorial University of Newfoundland in the exciting field of Linguistics. As part of my research program I am required to complete a thesis project of my design. For this project, I am investigating how English is spoken here on Mount Desert Island, and whether or not the tourism economy that we are dependent on has any effect on the way that we speak. If you would be interested in participating in this project by sitting down with me for a recorded interview, I would be very appreciative if you would volunteer as this project depends on the collection of speech recorded from volunteers like yourself in the community so that I can determine what the community as a whole is doing. If you would be interested in an interview: your speech will be recorded for a portion of the interview. This will take approximately 1-2 hours of your time. Thank you in advance for your consideration, and I look forward to hearing back from you.

The proposal for this research has been reviewed by the Interdisciplinary Committee on Ethics in Human Research (ICEHR) and found to be in compliance with Memorial University's ethics policy. If you have ethical concerns about the research (such as the way that you have been treated or your rights as a participant), you may contact the Chairperson of the ICEHR at iceher@mun.ca or by telephone at (709)-864-2861.

Sincerely,
 M.J. Antiqua-Parlee
 M.A. Candidate
 Department of Linguistics
 Memorial University of Newfoundland
 Field Location:
 27 Gray Farm Road
 Mount Desert, ME 04660
 Land Line: (207) 244-3095
 Cell: (207) 664-9624
 E-Mail: mjf802@mun.ca

C3. Script – Social Media Recruitment Script

Hello fellow Islanders! Want to help a local linguist to understand just what it means to be an islander, and to live and use language in an area where the stream of summer visitors doesn't seem to end? Well - this is exactly what I'm looking to figure out in my research project in my research for my Master's degree. If you could volunteer about an hour of your time it'd help me to answer these questions about what life and language use is like today! Contact me at mjf802@mun.ca for more details, or send me a private message via Facebook.

The proposal for this research has been reviewed by the Interdisciplinary Committee on Ethics in Human Research (ICEHR) and found to be in compliance with Memorial University's ethics policy. If you have ethical concerns about the research (such as the way that you have been treated or your rights as a participant), you may contact the Chairperson of the ICEHR at iceher@mun.ca or by telephone at (709)-864-2861.

C4. Community Service Credit Form – Mount Desert Island High School

Two students of Mount Desert Island High School, a local high school, participated in my study. As an added benefit for their participation, I offered credit hours for community service, a state graduation requirement with the permission from the high school's administration for their participation in the project. On this form, I provided the student's name and notated that they had done an interview with me for a research project on MDI English (therefore receiving eligibility for an hour's worth of credit in the program towards their graduation requirement) in the program. This form was submitted to the program coordinator at the high school.

Appendix D. ICEHR Documentation



Interdisciplinary Committee on Ethics in Human Research (ICEHR)

Office of Research Services
St. John's, NL Canada A1C 5S7
Tel: 709 864 2561 Fax: 709 864 4612
www.mun.ca/research

ICEHR Number:	20140687-AR
Approval Period:	November 1, 2013 – November 30, 2014
Funding Source:	
Responsible Faculty:	Dr. Gerard Van Herk Department of Linguistics, Faculty of Arts
Title of Project:	<i>Keeping a Local Identity in a Multiplex Community: A Case Study of 'Bah Habah' English</i>

November 1, 2013

Mr. Mark Furrow
Department of Linguistics, Faculty of Arts
Memorial University of Newfoundland

Dear Mr. Furrow:

Thank you for your email correspondence of October 29, 2013 addressing the issues raised by the Interdisciplinary Committee on Ethics in Human Research (ICEHR) concerning the above-named research project.

The ICEHR has re-examined the proposal with the clarification and revisions submitted, and is satisfied that the concerns raised by the Committee have been adequately addressed. In accordance with the *Tri-Council Policy Statement on Ethical Conduct for Research Involving Humans (TCPS2)*, the project has been granted *full ethics clearance* to November 30, 2014.

If you intend to make changes during the course of the project which may give rise to ethical concerns, please forward an amendment request with a description of these changes to Theresa Heath at icehr@mun.ca for the Committee's consideration.

The *TCPS2* requires that you submit an annual status report on your project to the ICEHR before November 30, 2014. If you plan to continue the project, you need to request renewal of your ethics clearance, including a brief summary on the progress of your research. When the project no longer requires contact with human participants, is completed and/or terminated, you need to provide the final report with a brief summary, and your file will be closed. The annual update form is on the ICEHR website at <http://www.mun.ca/research/ethics/humans/icehr/applications/>.

We wish you success with your research.

Yours sincerely,

Gail Wideman, Ph.D.
Vice-Chair, Interdisciplinary Committee on
Ethics in Human Research

GW/th

copy: Supervisor – Dr. Gerard Van Herk, Department of Linguistics, Faculty of Arts

D2. ICEHR Amendments

Terms to the original terms and conditions to conduct research with humans were amended on February 4, 2014 to extend the lowest age included in the corpus to 14 years of age. Additional amendments were made following annual updates, allowing the project to extend beyond the initial approval date. These annual updates continued until the project's completion following its submission for approval.