The social stratification of the voiced interdental /ð/ in the Battery dialect

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Abstract

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The social structure of a community has a significant influence on one's
social network and identity. For instance, cohorts with multiple similarities in
their social structure, especially those in low-status communities that are socially
isolated, tend to have similar dialectal features (e.g., Chambers, 2003; Lippi-
Green, 1989; Milroy, 1982). This study investigates the social and linguistic
factors that contribute to the stratification of the voiced interdental /ð/ (a *marker*
in Labovian terms) in the Battery, a small community outside of St. John's,
Newfoundland. Once a small fishing community known to be socially
marginalized and segregated, the Battery is today a highly sought after area
characterized by rampant development and expensive real estate, while still
retaining some of its fishing village charm.

This study adopts a variationist methodology for data collection and
analysis, employing standard sociolinguistic interview protocols across a stylistic
hierarchy to investigate the variable production of /ð/ and its less prestigious
variant [d]. Results of the multivariate analysis (via Goldvarb X) demonstrate that
there is possibly an intergenerational dialect shift with an increase in the use of
the more prestigious variant [ð] from the older to the younger Battery natives. In
addition, the results indicate a social stratification of /ð/ between members of the
younger generation: Those still residing in the Battery pattern similarly to the

older Battery natives in their use of the low-status identity marker [d], whereas those living outside of the community use the form significantly less. The results also reveal that there is significant variation in the use of /ð/ based on gender and style. The linguistic constraints that affect the variable production of /ð/ include word class and manner of articulation.

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I cannot finish my acknowledgements without mentioning the most significant person in all of this, my mother. Although she has not actually been here for any of this degree, I have never forgotten that her unwavering support of me throughout my life had inadvertently led me to where I am today. Not a day goes by that I do not feel her here or acknowledge her influence in what I have been able to accomplish.

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CHAPTER 1: INTRODUCTION AND BACKGROUND

1.1. Introduction

This thesis investigates the factors which contribute to the social stratification of /ð/ in the small Newfoundland community outside of St. John's, known as the Battery. Speech samples of twelve community members who are native to the Battery have been analyzed via *Goldvarb X* for their use of /ð/ and the commonly substituted [d] variant. In addition, the samples include responses to a questionnaire, which contain items that reflect concepts from *Social Network Theory* (Milroy, 1976, 1980) and *Social Identity Theory* (Tajfel, 1978) to further analyze the participants on social grounds. *Social Network Theory* and *Social Identity Theory* form the core of this study's theoretical framework; it is believed that the former represents an objective and spatial notion of group affiliation, whereas the latter represents a more subjective and personal notion of affiliation.

In order to understand the dynamic social structure and dialect of the Battery community, the distinctiveness of Newfoundland as a province in the wider Canadian context has been addressed in this study. Newfoundland drastically differs from the rest of Canada through its historical, economical, geographical and social circumstances. It is no wonder, then, that its dialectal characteristics have enjoyed the same uniqueness based on these contributing factors. Moreover, numerous linguistic features have been noted as distinct to Newfoundland and studied at length across the island. The use and stratification of /ð/ is the feature of interest in the current study based on its pervasive nature in Newfoundland speech but most importantly, on its characterization as a low-

status identity marker. Although /ð/ and /θ/ are sometimes studied together, it is believed that the use of [d] for /ð/ has somewhat more of an iconic status than the use of [t] for /θ/. In addition, the variable /ð/ has been more frequently studied in Newfoundland.

This study focuses on the Battery, a small fishing community outside of the Newfoundland's capital city of St. John's that is as unique to the region as Newfoundland is to Canada. Historically known for being an impoverished and socially segregated neighbourhood, the Battery has undergone many changes in the last few decades. Today, it is a highly sought after area characterized by widespread development and expensive real estate. No longer home to successive generations of known Battery families, the community now has a growing number of residents that are not from Newfoundland let alone from the nearby areas. Although the Battery has retained some of its fishing village charm, it is for the most part, unrecognizable from decades ago, in both the face of and faces in the area. However, there are still some current residents that are native to the area and know the simple, yet hard life of the Battery's past.

The few remaining elderly in the Battery have typically lived their entire lives in the area, raising families and working in the community when it was a self-contained community, supported by a thriving fishing industry. It was assumed that these individuals would have little variation in their speech, categorically using the low-status variant [d]. It was predicted that the younger generation of Battery natives, who spent their formative years in the community, would perhaps show greater variation in their speech patterns, presumably from

continual changes in the community's social structure as a result of urbanization. It is believed that this younger group of Battery natives is the first generation that may possibly have social networks and identities that are not exclusively tied to the community as is typical of the older population.

As urbanization affects all communities across Newfoundland, the younger generations in St. John's are increasingly becoming subject to dialect leveling due to an increase in outside influence (Clarke, 1991; D'Arcy, 2005). Therefore, it is possible that the younger natives that have not remained in the Battery or maintained strong social ties to the community may have been affected by the mobility gained from living outside the area. It has been the interest of this study to look at the potential dialect shift between the generations as well as uncover whether the strength of the network structure would predict linguistic behavior. To use Milroy and Margrain's (1980) term, it was predicted that the greater the "vernacular loyalty", the greater the level of integration into a Battery-centered social network.

The remainder of this thesis is organized as follows: Sections 1.2 through 1.4 focus on the background of Newfoundland, the Battery and the previous research which has motivated the current study. *Chapter 2* introduces the variable /ð/ and the patterns of variation associated with it, and reviews studies in Newfoundland that have looked at this social marker. It looks at the pertinent social factors such as social networks, social identity, style, and gender as well as the relevant linguistic factors of manner and place of articulation, /ð/ position within the word and word class. *Chapter 3* discusses the methodology and study

procedures adopted and provides the research questions and hypotheses. This is followed by *Chapter 4*, where the focus will be on the results and discussion of the findings. Lastly, *Chapter 5* offers the concluding remarks, shares the limitations of the study and outlines anticipated future research on the subject.

1.2 Introduction to Newfoundland

1.2.1 History

In order to gain a greater understanding of the Battery community dialect, it is important to look at the wider social landscape to which it belongs. Newfoundland's distinctiveness from the rest of Canada is evident by looking at its rich historical past dating back over five centuries. The abundant supply of fish was what initially attracted Portuguese, Basque, and Spanish fishermen to the island in the 15th century, which was first named *Terra Nova do Bacalhao* after the codfish (Orkin, 1971). The island was officially discovered by the English explorer John Cabot in 1497 and from then on, was known as *New Founde Lande* (Young, 2006). It was claimed as an English colony by Sir Humphrey Gilbert in 1583 due to its close proximity to England, which solidified Newfoundland's relationship with the British Isles (Chambers, 1997). Beginning in the 17th century, Newfoundland became the site of mass immigration and permanent settlement, with an overwhelming number of immigrants coming from Ireland and England (Clarke, 1997). What is most remarkable about the wave of immigration to the province is how well documented the sources of migration are as well as the resulting linguistic consequences that have heavily influenced

present day Newfoundland dialects (Clarke, 1985; 1997; 1999; Kirwin & Hollett, 1986; ÓhÚrdail, 1997; Orkin, 1971).

The first of the two main sources of settlement were southwestern England; specifically the counties of Devon, Dorset, Somerset and Hampshire as illustrated in Figure 1 (Kirwin & Hollett, 1986):
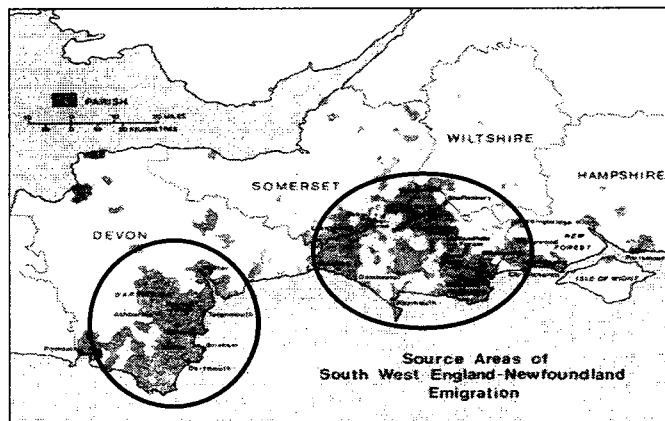
Figure 1: England's source areas of emigration.

Clarke (1985; 1999) notes that the second source was southeastern Ireland; specifically the counties of Wexford and Kilkenny as well as a thirty mile radius surrounding the county of Waterford as illustrated in Figure 2 (ÓhÚrdail, 1997).

Figure 2: Ireland's source area of emigration.

Although there were pockets of Acadian French and Scottish people that settled on the southwest corner of the island, they eventually succumbed to cultural and linguistic assimilation in the 20th century. The Irish settled primarily in the southern Avalon Peninsula, whereas the English were widely dispersed across the island (Clarke, 1997). Although English settlement outnumbered that of the Irish, it is often remarked upon today, albeit anecdotally, that there is a noticeable Irish flair to *all* Newfoundland dialects. Accordingly, the dialectal research by Story (1975) found that despite Irish settlement being confined mainly to the Avalon Peninsula, all Newfoundland dialects tend to exhibit influence from Hiberno-English (that which comes from Ireland). Kirwin and

Hollett (1986) attribute this to the rapid increase in Irish settlement which occurred in the early 19th century just as it peaked for the English immigrant population.

1.2.2 Geography

In addition to the historical influence on present-day Newfoundland dialects, its geographical isolation has helped constitute it as, what Clarke (1997) termed "a linguistic relic area" (p. 22). Although mobility has increased in the present day, its harsh climate and distance from mainland Canada has impeded travel to the province which sits in a different time zone from its neighbouring provinces. As a result, immigration to the province has always been sparse, which has allowed the dialect to remain relatively uninfluenced. In 1956, only 2% of the population was born outside Canada (Orkin, 1971), in 1971 only 5% was born outside Canada (Clarke, 1985), and in 2006, Statistics Canada reported that again, only 2% of those living in Newfoundland were non-Canadian born. Moreover, of the present population, 488,405 declared English as a mother tongue, 1,885 declared French as their native language and only 10,020 of those living in the province declared languages other than either English or French as their native language (www12.statscan.ca/English/census06/data/profiles, accessed 07/29/08).

1.2.3 Economy

Perhaps the lack of immigration and diversity among those living in Newfoundland has been compounded by the bleak economic situation that has

plagued the province. Since Newfoundland's discovery over five centuries ago, the fishing industry has been the main contributing source to its economy. The province has experienced many ups and downs with the fishing industry and when immigration drastically slowed in the 20th century, it had little choice in joining Canada's Confederation in 1949. However, joining Canada did not guarantee economic prosperity; in the last two decades, the collapse of the fishing industry has had devastating effects on one in four Newfoundlanders who rely on the cod fishery for sustenance (www.cdii/cod/histor10.htm, accessed 08/18/08).

On July 2nd, 1992, a two year moratorium on the northern cod fishery was declared due to ecological factors. In turn, the economic destruction that Newfoundlanders endured was exemplified by the largest mass layoff in Canadian history of over 30, 000 fishermen and fish manufacturing plant workers that followed soon after (www.heritage.nf.ca/society/moratorium_impacts.html, accessed 08/15/08). The fears that cod stocks would never be replenished has kept the moratorium in effect today, prompting a mass exodus of Newfoundlanders to mainland Canada seeking better employment opportunities. Needless to say, it is this same phenomenon that has occurred in the Battery community, albeit on a much smaller scale. The collapse of the fishing industry has not only affected the economic stability of the area, but also the entire social structure and composition of the community.

1.2.4 Linguistic aspects

Because Newfoundland's geographical isolation and economic instability have fostered a homogenous population, many of its historical linguistic features have been preserved. These features cover the language spectrum and can be found in the lexicon, morphology, syntax and phonology of Newfoundland English dialects. Much of the lexicon resembles Old English, with a number of Elizabethan terms still in use such as [*skirr*], meaning to hurry and [*drieth*], meaning drought (Orkin, 1971). One such example that can be historically referenced is the past tense word [*digged*] which was seen as proper by King James I of England and is still used today in many Newfoundland dialects (Young, 2006). In addition, much of the unique vocabulary of Newfoundland is largely based on its close ties to the ocean, fishing and seal hunting (Young, 2006). Some of the grammatical constructions in Newfoundland English are: 3rd person endings which are commonly added to first person verbs *I loves it* (Clarke, 1997); the lack of distinction between singular *you* and plural *ye* pronouns with usages such as *The two of ye are late again* (Orkin, 1971; Paddock, 1981); habitual aspect *be* and *do be* as in *He bees some happy* and *They do be early some lot* (Clarke, 1997; Clarke, 1999); and the Irish "after" perfect as a generalized perfect form as in *I'm after telling him twice* (Clarke, 1985).

However, the most overt dialectal characteristics of Newfoundland English are the distinctive phonological features that have also been investigated at length. Among those studied and characteristic of Newfoundland speech are: the interdental fricatives /θ/ and /ð/ variably pronounced as [t] and [d]

respectively (Clarke, 1985; Colbourne, 1981; Kirwin & Hollett, 1986; Paddock, 1981; Riach, 1969; Reid, 1981); the alveolar [l] variant of the standard postvocalic approximant [ɫ], often described as an Irish lilt or drawl (Clarke, 1981; 1985; Paddock, 1981); deletion of the glottal fricative /h/ in word initial position (Kirwin & Hollett, 1986; Riach, 1969); fronting of the low back /ɑ/ (/ɑ/ → [æ]), where *caught* is pronounced more like *cat* (Chambers, 1997; Clarke, 1981; 2004; D'Arcy, 2005) and /ɔj/ fronting (/ ɔj/ → [aj]), where *toy* is pronounced more like *tie* (Clarke, 1997).

1.2.5. Social aspects

It is this linguistic distinctiveness coupled with the isolation and low socioeconomic status that have combined to perpetuate the stereotype of the *Newfie* as an unintelligent, dim-witted, jovial fisherman, and help grant it low social status within the Canadian context. King and Clarke (2002) posit that the ethnic label of *Newfie* is used widely in mainland Canada to describe Newfoundlanders and "serves as a vehicle of social marginalization [...] associated with laziness and stupidity" (p. 537-538). Interestingly, this label divides Newfoundlanders because some view it as a derogatory term that is highly offensive, while others embrace it as a term of endearment that signifies their solidarity and regional pride. Regardless of how it is interpreted, it is undeniable that the stereotype is largely attributed to the language differences that divide Newfoundland English from the standardized English dialects accepted and spoken throughout Canada.

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The social issues which have greatly affected the province have had a significant impact on some of the smaller out-port communities, specifically on socioeconomic and sociolinguistic grounds. Uprooting out-port community members has meant exposure to more standardized Canadian English dialects which is why a shift towards the standard dialect is anticipated for these communities in the future (Clarke, 1997). The Standard English dialect has already exhibited an influence in the dialect stereotype studies carried out by Clarke (1981). She used a matched guise technique to garner the beliefs of a variety of St. John's residents as well as the youth in small rural communities.[1] Both study groups generally rated Mainland Canadian (MC), British Received Pronunciation (RP) and St. John's Upper (SJU) dialect groups more favourably than the out-port dialect speakers found in Witless Bay (WB) and the St. John's Lower (SJL) dialect group on status-assessment scales of confidence, intelligence, and having a high-paying job. Interestingly, the opposite result was found on solidarity scales depicting honesty, friendliness, kindness, likeability, and capacity for hard work, whereby the two lower status dialect groups, WB and SJL, tended to rate higher on these traits than the three standard dialect groups MC, RP, and SJU. Clarke's results highlight that the beliefs about standard speech among many Newfoundlanders is shifting and has undoubtedly been filtered from the collective mindset of many in mainland Canada. It is a widespread belief that Newfoundland's non-standard dialects are inarticulate and inferior versions of the

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[1] A matched guise (verbal guise) technique has interviewees evaluate the personal qualities of who they believe are various speakers in a given recording. However, the same speaker is generally used for all speech samples in the hopes of revealing the stereotypes and opinions interviewees have from speech (Lambert, 1967).

'proper' way to speak, and in doing so, one's ability to succeed may be diminished and one's intelligence may be questioned.

1.3 Introduction to the Battery

Many of the small out-port communities in Newfoundland are scattered across the island, often times in remote locations. Residents from these small fishing villages have had a harder time dispelling the *Newfie* stereotype than have those living in the capital city of St. John's where there is a much greater chance for economic advancement and social mobility. Accordingly, St. John's residents are also exposed to a greater variety of English dialects, which those in the tiny isolated out-ports are shielded from. Just outside of the downtown core of St. John's is a community which is as distinct as any out-port across the island, despite it being situated within the capital. The Battery, an old fishing village on the eastern edge of St. John's, sits on the side of a cliff at the base of historic Signal Hill. This neighbourhood rests along a channel known as the Narrows which overlooks St. John's Harbor and connects to the Atlantic Ocean. The Battery is currently home to 1,630 residents according to Statistics Canada (2006); however, the census tract area to which it belongs extends past the Battery proper to include another historic area in St. John's, Quidi Vidi. This study will focus solely on the Battery proper (henceforth, Battery) despite the statistical information on the area covering the two neighbouring communities as illustrated in Figure 3 (www.12.statscan.ca./ english/census06/data/profiles).
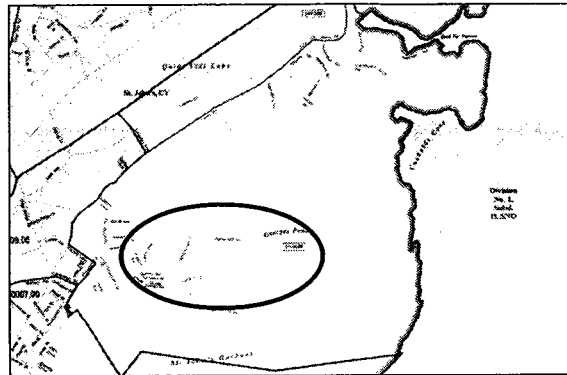
Figure 3: Battery community in census area.

The Battery community is divided into six sections: Outer Battery, Lower Battery, Inner Battery, Middle Battery, Upper Battery, and Top Battery. Historically, the Battery was also divided by religion and vocation; longshoremen (also known as stevadores) and other labourers, who were predominately Irish Catholic, lived on Lower, Middle and Upper Battery, whereas the English Protestant families, who were the offshore fishermen, lived on the Inner and Outer Battery sections of the community. Lastly, there is the Top Battery section, which was, at one time, made up mostly of welfare families. Interestingly, the Inner Battery is the only section that is no longer there today because it was all but demolished in the 1940s to make way for the construction of the U.S. army dock (Leighton, 1989).

The plethora of quaint coloured houses and the exquisite rock façade make the Battery one of the most photographed places in Newfoundland by the Department of Tourism (Downhome Traveller, 2005). This community is fast becoming an urbanized extension of the city of St. John's and now has some of

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the most expensive real estate development in the city. This is a stark contrast to only a few decades ago where all that was sought after about the Battery was its breath-taking views of both the city and the Atlantic Ocean.

The Battery's rich history dates back to the island's discovery and its being claimed as an English colony in the 16th century. In 1680, it was fortified by the British to protect St. John's from the French and later used as part of the British defense in both WWI and WWII. The municipal government made it officially a part of St. John's in 1888 (The Telegram, Dyer, 29/03/2006), but surprisingly, it was not until 1969 that the *Neighbourhood Improvement Program* (NIP) invested one million dollars of federal money in the community to provide it with running water, sewage lines, and garbage collection (Benson, unknown). Despite the basic improvements, when housing conditions were assessed in 1971, it was estimated that over 40% of the homes were in need of upgrading and almost 15% were identified as beyond repair (CBCL Report, 1978).

The Battery still lagged far behind St. John's in basic facilities and services; therefore, in 1979 and 1980 an even grander NIP project, which doubled the cost of the initial program, was undertaken. This project included the improvement and installation of a water distribution system, sewage services, road and street repair, retaining wall reparation, and community development. By far the most urgent of matters was the existing sewer system which was considered "archaic, unhealthy, and an eye-sore to both residents and visitors alike" (CBCL Report, 1978). Perhaps the disparity in amenities, which kept the Battery behind St. John's in many respects, is why the Battery was always looked

down upon as a low class, poor community. Because many Battery residents of that time relied on sanitary disposal trucks from the city, known to the locals as the "honey buckets", it has been remarked upon by some Battery natives that their status was directly linked to whether or not they had a toilet.

Ironically, the Battery has historically occupied the same position in St. John's as Newfoundland has in Canada – an isolated, low status, economically impoverished, tight knit community. However, the Battery's social segregation and low status did not hinder daily life in the community because it was economically sustained by the thriving fishing industry and had, at one time, its own store, church, school, wood mill, twine store and clubhouse. In addition to the community services and social segregation that encouraged Battery residents to remain in their community, the strong social networks and community bonds strengthened their ties to one another and to the neighbourhood. Unfortunately, the demise of the fishing industry coupled with the closing of St. Joseph's school helped to set in motion the breakdown of the community.

As the community structure changed and the Battery played host to numerous regentrification initiatives, many St. John's residents began to look to this neighbourhood for its low housing costs and ideal location. As a result, this community that used to be socially segregated and home to successive generations of known "Battery" families, was fast becoming home to artists, academics and tourists as the changes in the community prompted a change in resident composition. Consequently, the peace and tranquility of simple life in the Battery has been more and more plagued by constant city council squabbles over

building moratoriums to prevent construction and rapid development (Bradbury-Bennett, 2004). Although the Battery has been in the process of change for quite some years now, there are still some remnants of the old Battery that once was. Many of the houses are still colourful and quaint and some of the current residents are still native to the community, although both novelties may soon be distant memories.

The aim of the current study is to look more closely at two generations of Battery natives, their level of connection to the existing community and to examine the possible influence of that connection on their dialect. The younger generation is of primary interest because it is the first generation of Battery natives that have lived for a significant time in the *old* as well as *new* Battery eras. It is important to clarify what is meant by *old* Battery era. Prior to the NIP project in the late 1970s and early 1980s as well as the collapse of the fishing industry in the early 1990s, this neighbourhood was a self-contained unit that, despite its shortcomings, was strong and cohesive. However, as the face of the community changed, the faces in the community changed as well, which has escalated moving into a *new* Battery era. Accordingly, many of the younger generation have left the Battery in adulthood, which has propelled the breakdown of the *old* community structure. Specifically, the goal of this study is to discover whether leaving the Battery has led to a weakening of community ties and whether this has manifested into their underlying social relationships and personal identity. It is also of interest to ascertain whether the strength of their network and community-

centered identity has had any bearing on their use of the common identity marker [d] instead of the more socially prestigious [ð].

1.4 Previous Battery research

This current study was motivated by a previous small scale study (Williamson, 2005) that investigated whether Battery natives shared any linguistic features with St. John's natives. The earlier study provided evidence that the specific phonological features under investigation (see forthcoming discussion) were used significantly more by Battery natives than St. John's natives living in the Battery community. The Battery native (BN) group was represented by two current residents who were born and raised in the community and still maintained strong ties to the area. Their speech was compared of two representatives of St. John's (SJN) who were living in the Battery at the time of the study, but were in no way connected to the Battery (i.e., through kinship ties, education, and pre-NIP residence). Four features were investigated through tape-recorded interviews: the voiceless and voiced interdental fricatives /θ/ and /ð/, postvocalic /ł/ and low back vowel /ɑ/. Although these phonological features are characteristic of many other Newfoundland dialects and have been studied at length in St. John's and other parts of the island, it was their frequency of use and distribution that was of great interest in the study. In addition to the phonological investigation, the interview questions were structured such that ties to the community network, opinions on the community's history, current status and future outlook were attained from the participants. Table 1 illustrates the results of the study.

Table 1: *Previous Battery Study Results*

Participant/ Group	Phonological and Phonetic Variables			
	/θ/→[t]	/ð/→[d]	/ł/→[l]	/ɑ/→[æ]
BN1	20/29 69%	46/48 96%	147/148 99%	87/102 85%
BN2	3/33 9%	42/68 62%	145/191 76%	153/197 78%
SJN1	0/36 0%	0/42 0%	0/133 0%	0/112 0%
SJN2	0/21 0%	0/57 0%	0/85 0%	12/93 13%
Group Totals %	BNs: 37% SJNs: 0%	BNs: 76% SJNs: 0%	BNs: 86% SJNs: 0%	BNs: 80% SJNs: 6%

Due to the small sample size, it is difficult to make any generalizations about the findings of the former study, although the results clearly showed stark differences in the use of the four phonological features investigated. The BN group clearly used the phonological variants in high percentages compared to that of the SJN group, which failed to use the variants at all, except for the fronting of the low back /ɑ/. In the interest of the current study, the phonological variable /ð/ and its [d] variant were shown to exhibit large variability between the BN participants as indicated by the highlighted square block in Table 1.

The questionnaire analyzed participants' opinions about the community and network and was used as strictly complementary to gain perspective on the community, unlike the present study which implemented a questionnaire to obtain relevant data about the participants and their social affiliations and identities. It was interesting that both BN members provided information during their interviews that indicated that they were extremely loyal to their community and

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maintained strong social networks, despite the variation in their production of the less prestigious [d] variant (BN1: 96%; BN2: 62%). The differences in the use of the variant [d] by the two Battery native members showed an amount of variation worthy of further investigation into the social and linguistic factors that motivate the discrepancies observed.

Based on past studies in Newfoundland which have looked at both St. John's and smaller out-port communities similar to the Battery, it was believed that the use of /ð/ would follow along a continuum of sorts such that the older Battery natives would use the [d] variant almost categorically at one extreme, whereas those from St. John's would use the /ð/ at the other extreme, as shown in Figure 4 below.

Older Generation
Battery Natives (BNO)

↓

Younger Generation
Battery Natives
(BN)

↓

St. John's
Natives (SJN)
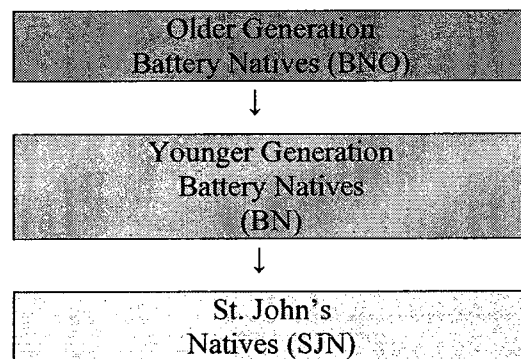
Figure 4: A continuum of /ð/: Least to most usage by group.

Although the current study focuses on the same community, it differs significantly from the previous Battery study by concentrating solely on Battery natives and employing a different methodology. The previous study was more comprehensive with respect to the number of variables; however, the present

study is much more meticulous in its focus on the use of /ð/ by investigating the effects from the linguistic factors (preceding environment – manner and place, word position and word class) to the social factors (social identity, social network, group status, gender and style).

Comparing the older generation of Battery natives (BNO) to the younger generation of Battery natives (BNY) against the changing social landscape, the current study focuses on the particular issues unique to the native community members. The BNO members included those that have remained in the community (BNOP) as well as a BNO individual (BNOA) that moved away from the area to reside in St. John's. The BNY group consisted of some who are presently living in the community (BNYP) and some who are absent from the community (BNYA) and now live in St. John's or other nearby areas.

This study was motivated by the belief that where Battery natives lived would represent much more than geographical location; it would be indicative of their connection to the Battery community and its members, their identity, and ultimately their speech patterns (see forthcoming discussion). In addition, the distinctions between the subgroups of members were made in the hope of seeing not only if there was a dialectal difference between them but also if there was a difference in their social networks (open, closed or neutral) and identity (community-based, individually-based, or neutral).

The appeal for looking at Battery natives that belong to different cohorts is motivated by the fact this historical community has changed so dramatically over the years that in order to study those native to this area, various profiles have to be

considered. From a sociolinguistic standpoint, the significance of the present study is noteworthy when one considers how this community has changed over the years and what it will be like in the future. The prospect of capturing a glimpse of any distinctive Battery dialect or intergenerational pattern of dialect shift is invaluable and will be treasured in years to come, long after all traces of the old Battery era are gone.

CHAPTER 2: SOCIAL AND LINGUISTIC FACTORS

2.1 The Characteristics of /ð/ and its variants

In this study, the phonological feature under investigation is the voiced interdental fricative /ð/. The most commonly used non-standard variant for /ð/ in most English dialects is [d], although [v] has been noted in some English dialects (Dubois & Horvath, 2003; Trudgill, 1988). Riach (1969) traced the interdental fricative back to their origins in Old Norse, which was responsible for bringing the feature to England following the Roman withdrawal. Accordingly, the /ð/ has persisted in no other language other than English and Icelandic, which is quite similar to Old Norse in many respects. It is believed that /ð/ was used rather indiscriminately to represent the /d/ which perhaps stuck at one point, so words such as *fiðele* became *fiddle* through the course of time. OhUrdail (1997) also looked back at the Hiberno-English dialect origins of Irish and found that as far back as the 16th century in ME and OE, /ð/ was being replaced by [d], so that *murðer* eventually became *murder*.

The selection of the interdental fricative /ð/ for this study employed feature selection criteria outlined by Labov (1977). The [d] variant is frequently used in the unstructured natural conversation of Newfoundland English; it is integral to the larger linguistic system; and lastly, the distribution is believed to be highly stratified for the groups under investigation. There have been numerous studies throughout the years that determined the particular phonological features in Newfoundland English with dialect-specific variants (see previous discussion

in section 1.2.4). With respect to the interdental fricative /ð/, the variant [d] has been well documented as highly characteristic of Newfoundland English and its array of dialects (e.g., Kirwin & Hollett, 1986; Orton, 1962; Paddock, 1977; Paddock, 1981; Riach, 1969).

Occurring most often in low-status dialects, the use of the less prestigious variant carries with it a definite "lack of social clout", whereby those that use it in high numbers are often stereotyped and relegated to the lower strata of society (Clarke, p. 19, 1997) Accordingly, the /ð/ variable was chosen for this research because one of its variants, [d], is seen as a social identity marker in many low-status Newfoundland English dialects.

2.2 Newfoundland studies of /ð/

Riach (1969) conducted a two-part study that looked at the dialectal variation of two phonological variables; the interdental fricative /ð/ and its voiceless counterpart /θ/. The first part of the study focused on the use of the non-standard forms in fifteen small communities across the island as well as St. John's. As expected, of the 1,966 participants, those from St. John's used the [d] variant the least and those from smaller out-port communities used the [d] variant more frequently. Riach's initial beliefs were confirmed because those from small out-port villages tended to use the less standardized [d] variant more often, which he attributed to pervasive use in their communities and because local teachers

tended to "practice the same home-speech habits [...] and perpetuate substandard speech by example" (p. 2).

The second part of his study looked at the dialects of two small communities, Bay Roberts and the Southern Shore. Of 35 first year university students from both dialect groups, those from Bay Roberts misused the fricatives /ð/ and /θ/ (44%) while those from the Southern Shore misused the forms 54% of the time. Unfortunately, the data analysis methods used does not permit us to delve into what social variables proved significant for all participants and what further divides the two areas of speakers. In addition, Riach's analysis combined /ð/ and /θ/ together; therefore, we cannot thoroughly look at one feature over the other due to the methodology he chose to employ. Riach speculated that daily social contact in their home communities, isolation from more standard dialects and the perpetuation by their local teachers are cause for out-port dialect differences, but again, there is no mention of concrete social differences between the two communities. What is interesting about this study is that it was one of the first in Newfoundland to relate social factors to the question of language standards and dialect markers.

Reid (1981) conducted a sociolinguistic study in the small out-port community of Bay de Verde, located 150 miles from St. John's, at the Northern tip of the Avalon Peninsula. The history of Bay de Verde is similar to many other out-ports across the island. It has always been centered on the fishing industry and most of its settlers are primarily from England. Reid looked at six phonological variables and matched them with the social variables of sex, age, religion and

style. At the time of the study, there were 745 people living in Bay de Verde, a community that was considered prosperous due to the cod industry and local fish and crab plants. The social variables of sex and religion were held constant by there being a relatively even number of males to females as well as an even division of religious affiliation (Catholic and Protestant) which, according to the study, was the best indicator of Irish or English ancestry. It was decided that SES was an irrelevant factor because there was no distinction in income level (due to the sole industry), education (due to over 80% of the population having grade 10 or less), and because almost all of the residents lived in the same type of dwelling.

Because there were numerous phonetic variants for each variable, it was decided that the binary distinction of "Standard" and Non-standard" would be employed in the analysis. The results showed that males used the stigmatized variant 8.8% more than females; older males used the [d] variant of /ð/ more than any other group, and religion proved to be statistically insignificant, although the Catholics used the non-standard slightly less than the Protestant group. Style results ran counter to claims made by Labov (1966), who posits that non-standard forms decrease as formality increases. At the most formal and causal ends of the style continuum, style did hold; however, the middle range of reading, which was to yield low levels of the [d] variants, actually had a high number of [d] usages. The most surprising result was that the younger female group used the [d] variant almost as much as the older male group. Reasons for this finding were attributed to the possible shift towards a more traditional role for this group or, perhaps, the use of [d] itself is becoming less stigmatized.

Colbourne's (1981) sociolinguistic study took place in the small out-port community of Long Island, Notre Dame Bay. This tiny isolated island off the northeast coast of Newfoundland, population 470, has been greatly affected by the diminishing fishing industry, like so many other small communities across the province. The need for alternative employment has prompted more of the younger generation to leave the island in order to attend the nearest high school. Colbourne looked at the social variables of sex, age, and education in the variation of eleven features, seven of which were phonological in nature. As in Reid's (1981) study, there were no obvious differences in the SES of the residents of Long Island; therefore, this social factor was eliminated. Similarly, because the majority of the population was of Protestant descent, the social variable religion was also discarded. Because of the small population, eight groups were formed through a non-random sampling technique. Colbourne discussed both the /ð/ and /θ/ together although the analysis did separate the two features.

Results showed that age was an important factor because the most non-standard speakers were the older males and the most standard were the older females. Surprisingly, education was correlated with an increase in non-standard usage, although the finding was statistically insignificant. His reasoning was that women are typically housewives that remain in the home while men are the breadwinners and subsequently the only ones that leave the island. Since men have a more secure social status, they likely feel no restrictions on how they speak, regardless of education level. Likewise, they may retain features of their local dialect to maintain their social status in this isolated northern community.

Long Island women were said to "view language as an indication of social mobility" and are therefore "spearheading the drive to standardize this dialect" (Colbourne, p. 53, 1981). Style proved to have a significant effect on variant use, whereby the greatest variation was found in the casual speech of the younger generations compared to the more formal styles. His results show that because the younger speakers displayed a greater range of speech styles and command of standard variants, a shift towards bidialectalism may be taking place. Because this community has undergone significant economic changes as well as a mobility shift, Colbourne posits that the variation in the younger generations may be due to greater contact with other dialects off the island and subsequent necessity. Borne out of the results of this study are the notions that perhaps bidialectalism and code-switching should not be viewed negatively if they can at all help preserve the speech of this tiny out-port community.

Clarke's (1985) sociolinguistic study focused on St. John's English and the influence from the main ethnic origin that settled on the Avalon Peninsula, the Hiberno English (HE) Irish dialect. Her aim in this study was to look for social patterns that correlate with the use of five phonological features of HE origin, one of which includes the relevant segment for my study, found in 120 St. John's residents. Participants were selected by stratified random sampling and put into five SES groups. Interviews were conducted to capture a range of speech styles to cover the style continuum characterized as Labovian in nature. Clarke used the social variables of religion, which was used to define ethnic background, along with age, sex, and SES. She expected the HE features to be used predominantly

by older male speakers as a possible gender effect and to show signs of social stratification between the two main ethnic groups, the Irish and the English. In addition, it was expected that the HE variants would spread to St. John's residents even if they were not of Irish descent.

Results demonstrated that age and sex emerged as significant because the [d] variant was used more frequently by older male speakers. In addition, [d] was found to be linked to low SES made up largely of unskilled labourers, less by the middle and lower class groups, and the least by the upper and upper middle class groups. Surprisingly, the [d] variant was not in decline despite the variant's social stigmatization; rather, there seemed to be evidence of a certain amount of neutralization of the [ð] and [d] contrast in casual speech, which reiterates the [d] variant as an identity marker. Furthermore, it seemed impossible to definitively say that HE Irish is spreading to residents of St. John's with roots other than Irish.

Because religion was the main ethnic marker between the two main groups and played no significant part in variant usage, it was impossible to attribute usage to one ethnicity over the other. Additionally, it was observed that the more stigmatized variants are being used most in the upper and upper middle class groups who represent the higher strata of socio-economic class and opportunity. This finding runs counter to Labov's claims that dialect change is usually led by the intermediate groups on the SES continuum. What is interesting about these results is the notion that change is taking place in the speech of St. John's residents who have the greatest mobility and possible influence from more Standard English dialects.

2.3 Social structure of the Battery

It is a widespread observation that the Battery has always had a low social status in St. John's and carried the stigma of being "the rough part of town". Besides its social isolation and economic inferiority from the rest of St. John's, its residents have always been characterized as having strong economic ties to the fishing industry, dedication to the local community and a relentless social bond to one another. Although it is difficult to attribute dialectal differences solely to specific social variables, it has been observed through much research that cohorts with multiple similarities in their social structures tend to have similar dialectal features (Chambers, 2003; Milroy, 1982). The social factors selected as relevant in the current study are based on their homogeneous division in the *old* Battery era but their likely variation in the *new* Battery era. In the following sections, each of those factors will be operationalized and discussed.

2.4 Social networks

The theory of social networks was developed as a composite variable by Lesley Milroy (1976, 1980) as part of her study on the vernacular spoken in Belfast working-class neighbourhoods. She investigated the notion of language maintenance with respect to low-status stigmatized forms and how they were able to persist in vernacular speech despite pressure from the standard forms. The *Network Strength Scale* was used to calculate the relationships within the community which consisted of family, work, and friendship for their *density* and *multiplexity* (Milroy, 1980). A network is characterized as maximally dense when

everyone knows everyone else in the neighbourhood and as multiplex when for example, person A interacts with person B in multiple capacities such as church group members, friends and workmates (Milroy, 2002). In the current study, social network will be operationalized according to Milroy's composite definition of density and multiplexity (1980, 1987). Therefore, each participant's network score was calculated by being assigned one point for each of the following fulfilled conditions:

1. *Membership of a high-density territorially based cluster.*

2. *Having substantial ties of kinship in the neighbourhood (more than one household).*

3. *Working at the same place as at least two others from the same area.*

4. *The same place of work with at least two others of the same sex from the area.*

5. *Voluntary association with workmates in leisure time. This applies in practice only when three and four are satisfied.*

This factor was considered in the present study because of its important role that it has played in previous studies. For example, Edwards (1992) examined the strength of social networks and their connection to the vernacular in his study of inner-city Blacks in Detroit. The model he employed, quite similar to the *Network Strength Scale* of social network theory, was the *Vernacular Culture Index* (VCI). Consisting of ten statements instead of social network theory's five, the VCI allowed community members to determine their own social network status as opposed to the interviewer judgment on the *Network Strength Scale*. Its questions covered the physical integration and psychological integration of

residents, not factoring in SES because all participants had generally the same low SES. It was found that residents who were isolated in their community and "favourably disposed to the neighbourhood" used the vernacular variants more frequently that those with greater geographical and social mobility (Edwards, 1992, p. 108).

Lippi-Green (1989) also looked at social network integration in an economically impoverished community, but unlike Belfast or Detroit, the community chosen was the rural village of Grossdorf, Austria, which closely resembled the Battery because of its one main source of employment in the fishing industry and its small population. Her focus was predominantly on kinship ties, social hierarchical structure and communication network analysis, a virtual "who knows who" approach. Lippi-Green discovered that the "quality and quantity of the specific individual links" led to more dense networks and greater use of the local variants (p. 217).

The Battery, like the communities in the aforementioned studies, imparts what Milroy (2002) describes as a "solidarity-based ideology" which focuses on a strong internal network that fosters localized patterns and a distinctive identity. It is speculated that all of the participants will somehow be a part of the Battery community network, but it will be the strength of these ties that vary and possibly enforce the use of the localized linguistic variant [d]. Thus, social network analysis is adopted in the present study to account for the vernacular maintenance and strong social network commonly found among close knit low status communities such as the Battery.

2.5 Social identity

Tajfel (1978) defines social identity as "that part of an individual's self-concept which derives from his knowledge of his membership of a social group together with the value and emotional significance attached to that membership" (p. 63). What came to be known as *Social Identity Theory* includes an individual rather than group focus which is self-conceptualized as opposed to attributed by society (Joseph, 2004). However, in the current study, it seems impossible to conceptualize identity solely as an individual act because as Milroy (1982) asserts, identity is intrinsically linked to the community, made up of powerful symbols of group values. Lane (2001) supports this notion by positing that when residents in limited fishing communities such as the *old* Battery are highly dependent on the community and local economy, they often have to reconstruct *both* their individual and local identities in the wake of outside economic and ideological pressures. For the Battery community, these outside pressures are likely connected to the growth in urbanization, which has caused the need to restructure what it means to be from the area.

It is posited, based on past literature, that dialects are intrinsically linked to social identity construction and that those using low status varieties, often do so as a way to symbolize their group identity and values (Blom & Gumperz, 1972; Milroy, 1982). Adapting criteria outlined by Tajfel (1978), the notion of social identity has been operationalized by incorporating related concepts of social categorization, (the social stereotyping of the in-group norms and value distinctiveness); social identity, (the knowledge of the group membership and its

emotional significance); social comparison, (links the categorization and identification aspects with reference to outside groups) and psychological group distinctiveness. It was believed that participants in the current study would either identify themselves with a community-based, individually-based or neutral identity based on community connection. Accordingly, a community-based identity is one in which identity is achieved via strong group affiliation and pride, whereas an individually-based identity would not exhibit the same level of pride and perceived dedication to one's social group.

2.6 Gender

Gender became a focus of language variation studies in the 1960s with Labov's survey work carried out in his Martha's Vineyard and New York studies (Labov, 1966). While there are numerous approaches to gender, there are two main approaches that are consistently followed, as outlined by Wodak and Benke (1997). The first is the Labovian approach, which focuses on the idea of prestige and how individuals in the lower classes of society tend to hypercorrect and emulate the dialect of the higher classes for a more ideal social position. Although this line of thought may seem to be somewhat related to the community under investigation in terms of social structure, it is the second approach to gender outlined by Milroy that seems to correspond more to the historical gender roles in the Battery. For example, the network studies by Milroy (1976, 1980) looked at the variation of specific groups and indicated that the group's strength and cohesion may help in determining the gender roles.

The Battery community has historically had very traditional and definite gender roles based on the division of labour of the sexes. Men have always been the primary wage earners of the family while women stayed home and raised children. It is not to say that women occupied an inferior position than that of the men in the Battery. It appeared to be the opposite scenario because due to the average size of the families (often ten or more children), limited resources (lack of indoor plumbing) and economic status, women appeared to have been strong heads of the household who had an equally important position in the family as did their husbands.

Milroy found in her network studies of lower class Irish communities that men achieved a particular status level though their occupation and the solidarity gained by working predominantly with other men from the community. Accordingly, women felt less pressure to exert their status through language and consequently, had what Milroy (1980) termed more "linguistic freedom" (p. 37). The social structure of the Battery mirrors the setting of the Milroy studies in many respects, especially in the old Battery era. Therefore, variation between the genders' application of /ð/-stopping may in fact represent the social structure of the community as a whole.

2.7 Style

The inclusion of style in variationist studies was first introduced by Labov (1972), who posited that the concept of stylistic variation allows speech to be investigated in both formal and informal uses. The hypothesis is that as the

formality increases in speech, so too will the accuracy of the target variable. It is important to note that style is a complex variable that often includes many factors. There is often no conscious choice as to which level of formality will be used in one's speech. Wodak and Benke (1997) state that "stylistic variation is not a characteristic of the speaker as such, but of the speaker's relationship to the resources of the language and of the situational contexts in which the speaker finds himself at different times" (p. 50). Ideally, researchers collect tokens in a wide range of stylistic levels to model Labov's five-level hierarchical distinction of formality. As will be discussed in Chapter 3, a similar approach to style was adopted in this study.

2.8 Production problems with /ð/

Along with its voiceless counterpart /θ/, the /ð/ phoneme is considered segmentally marked in the world's languages (Maddieson, 1984; Wester, Gilbers & Lowie, 2007). Maddieson (1984) posits that according to the *UCLA Phonological Segment Inventory Database* (UPSID), /ð/ and /θ/ are rare amongst the class of fricatives and are the least occurring fricative type at just 7%. Interestingly, the most frequently occurring and least marked sounds in the UPSID languages are the dental and alveolar stops /t/ and /d/, which occur in 99.7% of the 317 documented languages. It comes as no surprise then that substitution for the /ð/ is typically the [d] variant (which will often be referred to

as /ð/-stopping throughout this investigation) for those languages that contain both the interdental and alveolar phonemes.

The dental fricative /ð/ is infamous for posing problems for L1 and L2 learners with respect to production and perception (Wester et *al.*, 2007). The common substitutions are the [d] or [v] variants depending on whether the source of the substitution is influenced by cross-linguistic or developmental factors. According to an Optimality Theory[2] analysis, a preference for the avoidance of a marked /ð/ would lead to substituting [d] for /ð/ because stops ([d]) are universally less marked than fricatives ([ð]) and, accordingly, they have a tendency to be used more frequently (Lombardi, 2003).

On the other hand, because /v/ and /ð/ share the same manner of articulation [+continuant][3], it could be assumed that the substitution of /ð/ would result in a [v] instead of [d], a phenomenon that is observed in some English dialects. For example, it is well documented in many African American Vernacular English (AAVE) dialects that [f] and [v] are substituted for /θ/ and /ð/ respectively (Bailey & Thomas, 1998; Rickford, 1999). This is often explained by the articulatory similarity with respect to manner between the two sets of sounds.

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[2] Optimality Theory is a constraint based theory that posits that the phonology of a language is provided by the ranking of the set of universal constraints, with the optimal form as the one that is the output form (Gussenhoven & Jacobs, 1998).

[3] The feature continuancy relates to how the sound is formed in the mouth and whether there is a central occlusion in the vocal tract; therefore, [+continuant] means that there is no complete closure in the vocal tract as there is for [-continuant] segments (Gussenhoven & Jacobs, 1998).

Kjellmer (1995) makes the claim that the interdentals (/θ/ and /ð/) tend to shift to the labiodentals ([f] and [v]) because of the 'nearness' of articulation. However, this is not the case for Newfoundland dialects because there appears to be a preference for the unmarked form [d], regardless of the word containing /ð/ (i.e., function or content words).

The use of the less prestigious [d] can be explained by looking at early L1 acquisition data, which show that children acquire stops (e.g., [d]) before fricatives (e.g., [ð]). Specifically, Ross' (2004) study highlights six stages of English phonemic development, which begin around eighteen months to three years old and end around eight years of age. Ross posits that the range of stops are mastered in the earlier stages, typically stages one and two, whereas the majority of fricatives, specifically /θ/ and /ð/ are not typically acquired until stage five or six. In addition, he proposes that the system for English children can be generalized to children of other languages, so it makes sense that for L2 speakers who do not have /ð/ in their LI inventory also have a hard time acquiring this potentially problematic phoneme.

2.9 Linguistic factors under investigation

In addition to the noted problems of production, there are a variety of other linguistic factors that may compromise the production of /ð/. In the present study, four of these linguistic factors will be looked at: the Manner of Articulation of the preceding segment (MOA; i.e., nasals, liquids, fricatives, stops, and

vowels), the Place of Articulation of the preceding segment (POA; i.e. labials, coronals, dorsals, vowels and pause), the position within the word in which /ð/ occurs (i.e., word-initial, word-medial), and the grammatical class of the word (be it a lexical or function word).

The MOA factor group describes the environment preceding the /ð/. This factor group consists of nasals, liquids, voiced fricatives, voiceless fricatives, voiced stops, voiceless stops, laterals, vowels and pause[4]. Because /ð/ and vowels carry the feature [+continuant], it is commonly accepted in the literature that the most optimal output for the target [ð] variant is when it occurs in intervocalic position, also known as a *heavy* context (e.g., Trofimovich, Gatbonton & Segalowitz, 2007). A *heavy* context is one in which the relevant form is surround by [+continuant] segments, or when preceded by another [+continuant] consonant (e.g., a fricative).

The POA factor group describes the preceding environment of where /ð/ occurs. The POA factor group in the present study includes labials, coronals, dorsals, vowels and pause. The inclusion of this group is based on the assumption that the place of articulation of a segment (e.g., that of a given preceding environment) may affect the production of other sounds within the same prosodic domain (a type of assimilation process). However, it is acknowledged that this

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[4] 'Pause' is when there is no sound that proceeds the /ð/ segment, typically sentence initial or after a lapse in speech. This factor was also included in the POA factor group simply to ensure it was accounted for, as Goldvarb cannot process factor groups with empty items.

factor group will possibly have a neutral effect on the phenomenon investigated because the two variants of /ð/, namely [d] and [ð], both share the same place of articulation, the coronal articulator.

Another linguistic factor group included in this investigation is the position of /ð/ within a word: whether the /ð/ falls word-initially (e.g., *the*, *though*) or word-medially (e.g., *mother*, *other*). Word-final position (e.g. bathe) was eliminated as a potential environment due to the relatively limited number of words ending in /ð/. It is posited that when /ð/ is found in word-initial environments, there is greater likelihood of [d] substitution as opposed to word-medial environments (Bailey & Thomas, 1998).

The final linguistic factor group considered in this study describes the class of the word containing a /ð/: either a lexical word (nouns and certain pronouns; e.g. *father*, *other*), or a function word (determiners, pronouns; e.g., *those*, *they*). It has been found in other studies (Dubois & Horvath, 1999; 2003; Cardoso, 1999) that function words typically favour the neutralization or weakening of segments. This phenomenon may increasingly occur in function words due to what has been termed the *functional hypothesis* (Kiparsky, 1972). This hypothesis posits that, because function words merely indicate grammatical function (they lack semantic content), they are more likely to undergo a phonetic process such as substitution as opposed to lexical words. Another hypothesis proposed is the *frequency effect* (Bybee, 2001) which attributes the production of [d] for /ð/ in function words to the high frequency of these words in our everyday

language (such as *the, there*, etc.), which makes them a greater target for the application of /ð/-stopping.

In this section, it has been shown that the production of /ð/ may be triggered by a combination of extralinguistic and linguistic factors. For example, the extralinguistic factors discussed suggest that /ð/ may be a marker of identity where low status groups show preference and loyalty, for low-status variants despite their stigmitization. With regards to the linguistic factors, it could be that /ð/ production is also triggered by the phonological environment in which it occurs, with [+continuant] segments favoring its production. Based on these hypotheses, in the next chapter, the research questions and hypotheses are formulated in order to investigate these issues further.

CHAPTER 3: METHODOLOGY

3.1 Research questions and hypotheses

Based on previous literature, the use of [d] for /ð/ is known to be a stigmatized marker in various Newfoundland dialects. The current study, which was semi-exploratory in nature, sought to uncover the relevant social and linguistic factors that are linked to the stratification of /ð/ among Battery community natives. While the studies previously discussed were conducted in a variety of communities across Newfoundland no other study has specifically focused on the Battery. It was assumed that the strength of the community members' social networks and identities would be shaped by the increase in urbanization and shifting community structure. In turn, it is speculated that the change in their social dynamics may have ultimately affected their speech.

The pertinent research questions included a wide range of factors to be statistically analyzed. For instance, the extralinguistic factors include social network, identity, style, gender, and group status. The linguistic factors include the phonological environment (specifically manner of articulation (MOA) and place of articulation (POA) of the preceding segments), word class and word position of where /ð/ is located. The research questions that were addressed in this study are:

1. What extralinguistic and linguistic factors affect the production of /ð/?

2. How does the variable /ð/ behave across the four Battery groups under investigation (Battery native old present – BNOP; Battery native old absent – BNOA; Battery native young present – BNYP; and Battery native young absent – BNYA)?

Due to the large number of dependent variables included in this study and the exploratory nature of sociolinguistic studies, there was not a separate research question for *each* specific linguistic and extralinguistic variable adopted. As outlined in the preceding chapters, the general assumptions are based on previous research and general theoretical knowledge of phonology and phonetics. It was speculated, however, that there would be evidence of an intergenerational dialect shift from the older to the younger generation. Moreover, it was believed that there would be little to no difference between the older generation's groups (BNOP and BNOA) because having spent that much time in such a segregated community, there would not be a significant difference in their use of the [d] variant. On the other hand, it was hypothesized that there would be stratification in the younger generation of Battery natives (BNYP, BNYA).

Specifically, the younger generation of Battery natives still residing in the Battery (BNYP) would likely align themselves with traditional social networking and identity, characteristic of the old Battery natives. Moreover, their use of the [d] variant is expected to approximate BNO norms as a result of the closed network and social identity they share, as well as the diminished contact with outside communities. Conversely, the younger generation of Battery natives who have left the Battery to live elsewhere (BNYA) and break from the strong community ties would exhibit less variation in the use of the /ð/, similar to the typical variation of St. John's natives in other studies (Clarke, 1985). The following diagram in Figure 5 details the anticipated continuum of [d] usage by group status and generation.
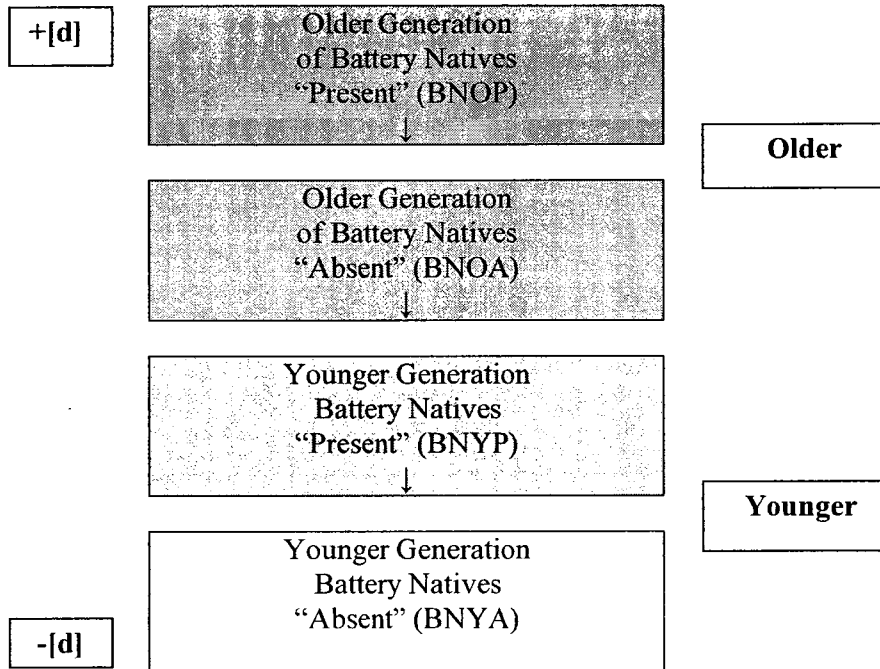
Figure 5: Anticipated continuum of the decrease in [d] usage by group.

3.2 Participant groups

There were twelve Battery participants who took part in the research (see Appendix D for demographic information on each participant). Half of the participants were met through the friend-of-a-friend method, adopted in the dialect study in Belfast (Milroy, 1982) and also used in the previous Battery study (Williamson, 2005). Having been introduced to a number of participants by one BNYP member seemed to make these participants more comfortable to do the interviews and less skeptical of the intent of the research. It is safe to assume that without an inside source, some of the interviews would have been hard, if not impossible, to obtain. Two participants were found through random referrals and the remaining four were found by going door to door in the community asking people to participate in the study.

In this study, it is important to see the age of the participants from the perspective of the *linguistic life course* as opposed to discrete stages that are often assumed with chronological age (Eckert, 1997). For example, one's life course involves changes in family, social and employment status, social networks, place of residence, and community and institutional participation. This would insure that the linguistic differences in the Battery natives are not explained via age-grading models which posit that cohorts behave linguistically based on age group expectation. Because the significant changes to life in the Battery occurred along side specific events, such as the regentrification efforts in the late 1970's as well as the fishing industry collapse, the groups were created based on life stage during that specific time.

As a result, the participants were made up of the older generation of Battery natives (BNO) along with the younger generation of Battery natives (BNY). The BNO participants were all over the age of 70, which means that in the *old* Battery era, these individuals were adults with families and established jobs. In addition, they all experienced life in the community when it was still a segregated area with little to no "outside" families residing there. On the contrary, the BNY participants were all between the ages of 35-55. These participants were children in the *old* Battery era which means they were all raised and schooled in the Battery and also experienced life pre-NIP and, consequently, before the collapse of the fishing industry, as shown in Table 2.

Table 2: *Criteria for Selecting Participant Groups*

Groups	Current Age	Residence	Age (Significant (Life Course)
BNOP (4 participants)	Over 70	Past – Battery Present - Battery	Pre-NIP adults
BNOA (1 participant)	Over 70	Past – Battery Present - St. John's	Pre-NIP adults
BNYP (4 participants)	35-55 years old	Past – Battery Present - Battery	Pre-NIP children
BNYA (3 participants)	35-55 years old	Past – Battery Present - St. John's	Pre-NIP children

As previously stated, both generations have been further divided into those who have remained in the community and those that left the Battery to live in St. John's or other neighbouring communities. It is important to note that all members living outside of the community have been gone for an average of fifteen years, for reasons such as proximity to work, school and wanting to leave the area as young adults to escape the insular community structure. Despite leaving the area for a variety of reasons, this does not mean that those participants still feel the same way as when they left (this will be addressed in Chapter 4).

3.3 Interview procedure

At the onset of the interviews, a consent form was provided to all participants explaining the anonymous and confidential nature of the recorded interviews (Appendix A). In order to elicit natural, spontaneous speech from the participants and make them as comfortable as possible, the informal interview

was the first elicitation technique used in this study and included an orally administered questionnaire. The questionnaire consisted of four parts (See Appendix B) with both structured and semi-structured questions as well as statements that required Likert-scaling[5] responses. To safeguard against observer's paradox common in interview situations, (e.g., Labov, 1972) the interviewer, having lived in St. John's a number of years, code-switched into a general Newfoundland accent to prevent potential accommodation strategies on the part of the participants.

Part 1 of the questionnaire consisted of pertinent demographic questions such as age, gender, education and employment status. Part 2 was a less structured section that incorporated questions concerning the participants' views on life in the Battery, past, present and future (e.g. *How do you think the Battery has changed over the last few decades?; What do you think the Battery will be like in twenty years?*). In this part, participants were encouraged to share anecdotal information about growing up in the community. Part 3 was based on the five pertinent criteria from *Social Network Theory* called the *Network Strength Scale* (Milroy, 1982). Responses to statements during the interview were in regards to kin, relatives and friends in the community, past and present employment and frequency of interaction with other community members *(e.g. How many of your family members still live in the Battery, within the same household or in different households?; Do you currently work at the same place with any other people from the Battery?*). Part 4 focused on the criteria outlined by Tajfel (1978) based on

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[5] A Likert-scale is a multiple-choice style of question used in questionnaires where the response options are interval-based.

Social Identity Theory. There were statements regarding the notion of social identity, categorization, and comparison and rely on the perception of the participant (e.g. *I think people from the Battery have different values systems than people from St. John's; People from St. John's negatively stereotype people from the Battery*).

It is important to note that the question responses in Part 3 were supplied by the interviewees; however, it was the interviewer who determined, based on those responses, whether or not the participants fulfilled the five conditions based on *Social Network Theory.* In Part 4, the statements were based on the concepts of *Social Identity Theory* and were supplied by the participants who shared their beliefs about each statement on a traditional five-point Likert scale, with *one* indicating strong agreement and *five* indicating strong disagreement.

3.4 Reading task

The second elicitation technique used was a reading task of approximately 415 words in length (See Appendix C) and was adapted from a previous study to measure the use and production of /ð/ (Trofimovich et al., 2007). This particular text is ideal because there were a variety of linguistic environments in which the /ð/ occurred in a total of 88 instances (i.e., 25 stops, 17 fricatives, 11 nasals, 12 liquids, 8 vowels, and 9 utterance-initial occurrences; 83 word-initial function words and 5 word-medial lexical words). The reading task was employed in order to probe the use of /ð/, which utilized an additional style in the formality hierarchy outlined by Labov (1972). The decision not to explore the formality

continuum at greater length was because the Battery is typically a closed community that is not fond of outsiders. Therefore, any attempt to expose them to a barrage of tasks may have potentially compromised the interviews or their referrals of others in the community.

Both tasks were recorded via a *Marantz* PM660 portable solid state recorder with built-in microphone. Both the questionnaire and the reading task took an average of thirty minutes to complete; however, some of the interviews went on for over an hour. Although the primary means with which the data was collected was through spontaneous conversation and only one task of higher formality, it is assumed that the nature of the questions and length of each interview provided the necessary amount of data to show some semblance of social and/or dialectal representativeness.

3.5 Data analysis

The ethnolinguistic data was collected via the questionnaires in the recorded interviews. Each participant answered the questions verbally which were recorded and analyzed by the interviewer at a later date. The decision to have the responses given verbally was to allow for more conversation to occur, in the hopes of garnering more data to work with. Part 3, which contained the responses representing the *Social Network* variable, was based on the *Network Strength Scale* used in Milroy's Belfast study (1976, 1980). As previously stated, due to the nature of this study, it was imperative to gather information regarding the present community network as well as the former community network. For

instance, there seemed to be little point in asking about their present connection with fellow community members if they did not feel any connection with the community and residents in the past. During the interview, all community members identified themselves as having an extremely strong community connection and social network in the *old* Battery era, which allowed for a uniform baseline of sorts.

There were 18 questions in total that covered the five indicators determining network strength. It is important to reiterate that it was the interviewer who determined whether each of the five conditions was fulfilled based on the responses given (see Appendix D for a complete list of the condition totals by participant). The possible scores of 5 were given for both past and present network affiliation, which were typically "yes" in relation to the *old* Battery era, and typically "no" in relation to the *new* Battery era. Final network categorizations were calculated by combining past and present scores together, such that a 5/5 would equal the highest possible score and a categorization of a closed network. Conversely, a 0/0 would earn a categorization of an open social network. Subsequently, a score of 8-10 was considered a closed network, 5-7 was a neutral network and 0-4 was an open network. In addition, it was decided not to award partial scores (.5) if participants answered 'yes' on only one of the two questions that required 'yes' responses. Also, if the participant was unsure or could not answer a question based on lack of knowledge, this was noted in the coding but was not considered as fulfilling the indicator in question

Although this measure was rather subjective, the theory behind the *Network Strength Scale* guided how the participants were categorized. For example, for the first indicator - *Membership of a high-density territorially based cluster,* the following questions were asked:

1. *Did the people that live in the Battery all know each other?*

2. *Do the people that currently live in the Battery all know each other?*

3. *When you were growing up did you socialize with people from the Battery more than people from St. John's?*

4. *Do you currently socialize with people from the Battery over people from St. John's?*

5. *Can you tell me 5 (or more) of the most well-known Battery Family names?*

The decision was made that in order to be categorized as fulfilling this indicator, the participant would have to have answered 'yes' to questions 1, no to question 2, something to the effect of 'people from the Battery' for questions 3 and question 4. For question 5, it was decided that over half (3) of the family names given would have to derive from the pool of family names that were selected as the most documented and well-known from all of the research in this community. An example of a different scenario comes from the third indicator - *Working at the same place as at least two others from the same area*, in which the following questions were asked:

1. *Did you ever work at the same place as any others from the Battery?*

2. *Do you work at the same place as any others from the Battery?*

3. *Did your father work at the same place as any others from the Battery?*

It was expected for the women from the older generation to answer 'no' to questions 1 and 2 as it was for those from the younger generation as well. In those cases, questions 3 from the above set would be the sole question to fulfill the indicator. It is acknowledged that the first and second indicators of the *Network Strength Scale* (See Appendix B, Part 3) would likely apply to all community members, whereas the third, fourth and fifth would relate more to relationships made through employment and, therefore, concern more of the men. For these related questions, it was still important for all members to answer them because it allowed the researcher to see if they believed that these relationships existed in their families as well as in the community at large.

Part 4 of the questionnaire dealt with the *Social Identity* variable, based on the theory by Tajfel (1978). With four primary concepts outlined in the theory (*social categorization, social identity, social comparison, and psychological group distinctiveness*), the statements were designed to capture the strength of their social identity. Each statement was read by the participant who would, then, rate on a scale from 1 to 5 how much they agreed with the idea on a personal level. For example, the concept of social comparison is reflected in the following statements:

1. *I think people from the Battery have different value systems than people from St. John's.*

2. *I think people that grew up in St. John's have had more opportunity than people that grew up in the Battery (jobs, education, employment).*

Results were not calculated by collapsing the scores for *each* identity concept, (which would group the 2 statements above together), but rather adding together

the scores from all 8 statements. With 1 being *strongly agree* at one extreme and 5 being *strongly disagree* at the other extreme, scores were added up such that the lowest number possible would depict the strongest level of social identity. Specifically, the lowest possible score could have been an 8 (selecting a 1 on all 8 questions) and the highest possible score could have been a 40 (selecting a 5 on all 8 questions). It was decided that a score of 1 to 20 would depict a community-based identity, a score of 21 to 30 would depict a neutral identity and a score of 31 to 40 would depict an individually-based identity. The rationale behind selecting these ranges is because having a rating of 1 or 2 on almost all of the questions (with an exception of two possible scores of 3) would warrant the community-based label. The range to depict a neutral identity would result in a score of 3 on each statement (with an exception of one possible 2). Lastly, rating 4 or 5 for each statement would mean a score of above 30, which would illustrate an individually-based identity.

The linguistic data were analyzed using the *Goldvarb X* statistical program (Sankoff, Tagliamonte, & Smith, 2005). All tokens extracted from the interviews were entered into the *Goldvarb* program and investigated in reference to all the social and linguistic variables previously mentioned. The *Goldvarb X* program displays the number of tokens collected and the percentage values observed for the production of the [d] variant, for each of the factors included in the analysis. More importantly, the analysis also indicates the statistical significance of each factor group and their corresponding factors in the production of /ð/ (see forthcoming discussion in Chapter 4). In addition to looking at the use of /ð/ and

its less prestigious variant [d], there was actually a third possibility factored in, namely progressive assimilation (e.g., *and then* being produced as [æn.nɛn] instead of [æn.ðɛn] or [æn.dɛn]; *because the* being produced as [bikʌz.zɚ] instead of either [bikʌz.ðɚ] or [bikʌz.dɚ] (this will be addressed in Chapter 4).

This chapter has detailed the methodology chosen and the rationale behind each element included in this study. The forthcoming chapter details exactly how the methodology was employed, the results of the statistical analysis and a discussion of those results.

CHAPTER 4: RESULTS AND DISCUSSION

In this section, the results of the quantitative analyses performed via the Goldvarb X (henceforth Goldvarb) statistical program are provided (Sankoff, Tagliamonte, & Smith, 2005). First, section 4.1 briefly details how Goldvarb works. Next, section 4.2 explains the different statistical analyses conducted. Although the primary focus is to report on the final results, for the sake of completion, the different steps taken in order to arrive at the final analysis and the rationale behind each run are outlined. Lastly, section 4.3 provides the results of the statistical analysis as well as a discussion of both the social and linguistic factors.

4.1. Goldvarb

Goldvarb is a program that executes a multivariate analysis, which is a set of statistical procedures performed in order for the researcher to identify the factors contributing to variation (i.e., between the two variants of /ð/: [d] and [ð]). Since the initial run in Goldvarb merely provides us with raw numbers and percentages, further steps are routinely performed in order to determine how each of the factors and factor groups contribute to the variation, independently from all others. The first of these steps is the *binomial one-level analysis* which provides us with the probability (in this particular case, the overall likelihood of [d] production) of each independent factor. The factor weights (p) can have a value ranging from 1.00 to 0.00, which show categorical usage of a phenomenon, be it all of the time (1.0) or never (0.0). Accordingly, a factor with a weight of above 0.50 is seen as a strong indicator that the phenomenon (in this case, /ð/-stopping)

will occur. However, because the *binomial one-level analysis* cannot provide us with the relative strength of each factor group in the application of /ð/-stopping, a further step in Goldvarb is regularly performed, known as the *binomial step up/step down regression analysis*, also called a *binomial up and down*. This step allows us to see which factor groups have a significant contribution (at $p < 0.5$) to the phenomenon under analysis.

4.2. Results of Goldvarb runs

In the corpus under investigation, all words containing an underlying /ð/ in either word initial or word-medial position were coded and analyzed. There were 3,795 tokens that were coded as either [ð], [d], or assimilation [assim]. Of the total number of tokens in the corpus, 1,219 (32%) were realized as [ð], 2,063 (54%) as [d] and 513 (14%) as [assim][6]. The first Goldvarb run contained all eleven original factor groups and their specific factors (see Appendix E) for the complete list). Since our primary concern was with the use of the social identity marker [d], often found in low-status Newfoundland dialects, the initial and subsequent Goldvarb runs were performed with the [d] (representing /ð/-stopping) as the default value, positioned against the alternative realizations of [ð] and [assim]. Because certain factors were eliminated in the course of the analysis due

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[6] The assimilation factor was discarded from the statistical analysis because this phenomena is not unique to the Battery community, nor has it been documented as a social identity marker in other Newfoundland dialects. However, since the process of assimilation was found in 14% of all /ð/ words in the corpus and for the sake of completion, an analysis focusing on the assimilation factor was performed (this will be discussed in section 4.3).

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to high interaction with other factor groups, some of the final results reported on

here may, indeed, come from the different runs carried out.

The preliminary step in the initial Goldvarb run provided a raw analysis of

all of the pertinent factors considered in this study. Consequently, the binomial

one-level analysis suggested that numerous factors from the eleven groups were

significant, shown in Table 3.[7]

Table 3: *Binomial One-level from First Goldvarb Run*

Group & Factor		Weight	Group & Factor		Weight
1. Place of Articulation	l (labial)	.59	7. Social Identity	C (community)	.49
	c (coronal)	.43		E (neutral)	.59
	p (pause)	.45	8. Gender	X (women)	.44
	d (dorsals)	.50		Y (men)	.55
	o (vowels)	.71	9. Group Status	A (BNYA)	.34
2. Manner of Articulation	n (nasals)	.21		S (BNOP)	.62
	t (vcless frics)	.52		P (BNYP)	.49
	z (voiced stops)	.70		T (BNOA)	.66
	e (pause)	.49	10. Participant	1	.45
	s (vcless stops)	.75		2	.40
	v (vowels)	.53		3	.51
	q (liquids)	.70		4	.66
	f (voiced frics)	.30		5	.16
3. Word Position	i (word-initial)	.52		6	.61
	m (word-medial)	.34		7	.57
4. Word Class	u (function)	.52		8	.38
	x (lexical)	.29		9	.70
5. Formality	R (informal)	.57		k [8]	.69
	F (formal)	.20		h	.67
6. Social Network	Z (closed)	.48		y	.53
	U (neutral)	.71			

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[7] For greater ease in understanding, the binomial one-level results have been converted into table format.

[8] Goldvarb only allows single digit coding; therefore, participants 10 to 12 had to be coded with a letter.

Observe that all of the factors included in the analysis are provided; however, those which appear to favour /ð/-stopping in this initial Goldvarb run (with weights above .50) are in bold. To make sense of the data in a lengthy output provided by a binomial one-level analysis, a scattergram of the results is illustrated in Figure 6. A scattergram is a representation of the binomial one-level analysis that allows us to see the same results in a visual format. The ideal representation of a scattergram is when the tokens (represented as dots) are as close to the diagonal line as possible, thus determining the "goodness of fit" of the model. Accordingly, those nearest to the line are deemed a "good fit" and those farthest away represent a "poor fit". The scattergram from the initial Goldvarb run below indicated a poor fit, thus suggesting the existence of interactive factors (e.g., the group *Word Class* interacts with *Word Position* because every function word is comprised of a word-initial /ð/).
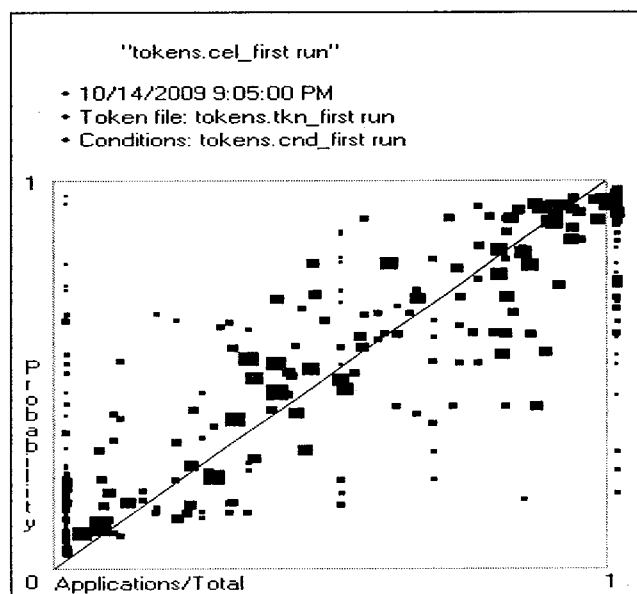
Figure 6: Binomial one-level scattergram from first Goldvarb run: A poor fit.

As a result, a binomial up and down was performed in order to eliminate insignificant factor groups that do not contribute to the production of the [d] variant. From the binomial up and down in the first Goldvarb run, Figure 7 illustrates the results of a typical Goldvarb analysis, which selects the factor groups favouring the variable phenomenon under investigation.

```
Run # 82, 191 cells:
No Convergence at Iteration 20
Input 0.552
Group # 2 -- n: 0.186, t: 0.455, z: 0.644, e: 0.437, s: 0.713, v: 0.732, q: 0.645, f:
0.250
Group # 3 -- i: 0.516, m: 0.337
Group # 4 -- u: 0.516, x: 0.292
Group # 5 -- R: 0.567, F: 0.199
Group #10 -- 1: 0.222, 2: 0.189, 3: 0.628, 4: 0.667, 5: 0.161, 6: 0.727, 7: 0.738,
8: 0.300, 9: 0.599, k: 0.696, h: 0.691, y: 0.697
Log likelihood = -1899.496  Significance = 0.065

All remaining groups significant
Groups eliminated while stepping down: 8  6  9  7  1

Best stepping up run: #37
Best stepping down run: #82
```

Figure 7: Output from the first Goldvarb Run binomial up and down.

As indicted, the binomial up and down analysis in Figure 7 selected five factor groups as significant in the production of [d] (at $p > .05$): Groups #2, 3, 4, 5, and 10 (i.e., those included in the best step up/down runs #37 and #82). Of the social factors, *Formality* (Group 5) was selected as significant with informal speech (R) favouring the [d] variant (.57). The second social factor group selected as significant by Goldvarb was *Participant* (Group 10) with eight of the twelve participants over the .50 threshold for their prospective factor weights. The

following linguistic factors had an effect on /ð/-stopping: *MOA* (Group 2) had vowels

(v = .73), voiceless stops (s = .71), liquids (q = .65), and voiced stops (z = .64).

Word Position (Group 3) was selected with the word-initial (i) factor at a weight

of .52. Lastly, *Word Class* (Group 4) proved to be a significant factor group with

function words (u) favouring the production of [d] at a weight of .52. The groups

eliminated as insignificant from the analysis include *POA* (Group 1), *Social*

Network (Group 6), *Social Identity* (Group 7), *Gender* (Group 8) and *Group*

Status (Group 9).

Despite the initial binomial up and down process deeming all remaining

groups significant, as shown above, this model still needed to be modified and,

subsequently, refined. It was decided upon that the factor group *Participant*

should be eliminated through the recoding process because of the overlap with the

other social factor groups, *Gender* and *Group Status*.[9] For example, each of the

participants belongs to one of the four groups depicting status as well as one of

the two genders. After removing the highly interactive factor *Participant,* the

binomial one-level from the second run (first recode) still showed a poor fit for

the model, exemplified in the scattergram below:

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[9] Typically, sociolinguistic research is concerned with group patterns and group
behaviour as opposed to individual patterns of variation. Specifically, the Battery
has always been a distinctive speech community with a unique social structure.
Therefore, our main concern was to focus on the group as a whole and the sub-
groups within, based on their level of network affiliation. As a result, it was
decided to shift the focus from the individual and remove the factor group
Participant, despite the binomial analysis deeming it significant in the initial
Goldvarb run.
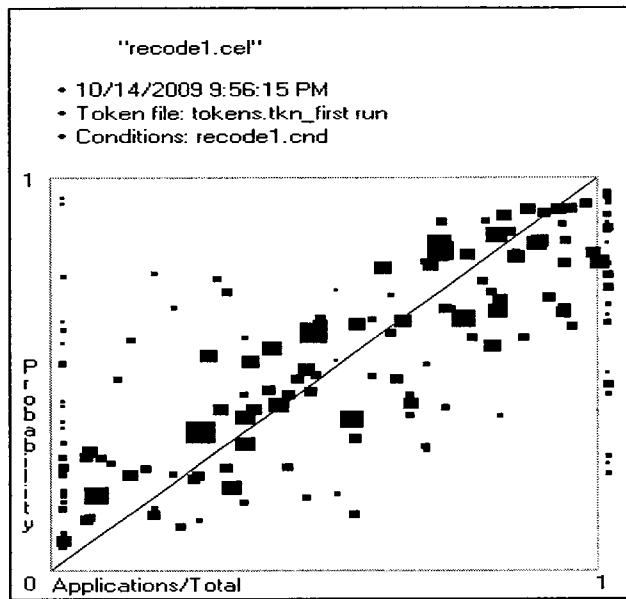
Figure 8: Binomial one-level scattergram from the second Goldvarb run: Still showing a poor fit.

As a result, a binomial up and down was performed in order to determine the significant groups and assist in the refinement of the analysis. Results from the second Goldvarb run indicated that there was little change in the linguistic factors kept from the original Goldvarb run (*MOA, Word Position,* and *Word Class*) as well as the social factor (*Formality*) retained from the original run; however, *POA* was now considered significant as was *Gender* and *Group Status.* Because the goodness of fit revealed through the scattergram in Figure 8 still showed a poor fit for the recode, it indicated that a further Goldvarb run was needed.

Because of the need to address the persistence of interaction between certain factor groups, a third Goldvarb run was performed. In this analysis, *POA* was removed in order to isolate and look more closely at *MOA,* a factor hypothesized to have an effect on /ð/-stopping. There is interaction between these two variables

because each of the *MOA* factors belongs to a *POA* factor and vice versa, such that every voiced stop, for example, is either labial, dorsal or coronal and so on. In addition, W*ord Position* was eliminated so that *Word Class* could be investigated more closely. The interaction between these two factor groups is eminent because almost all of the words with word-medial /ð/ are lexical words, and almost all of the words that have /ð/ word-initial are function words. Of the social factors, *Gender* was removed from the analysis so that the interaction with *Group Status* could be avoided. Obviously, all participants belong to one of the four status groups and have a gender, so the decision was made to focus on and isolate the social grouping that would best represent the Battery community. Since *Social Network* and *Social Identity* were removed in the previous run and are intrinsically linked to the status grouping, the decision was made to keep *Group Status*.

The scattergram results of the third Goldvarb run are illustrated in Figure 9, which indicates a slightly better fit for the model of variation under investigation. Although it was much improved from the previous two runs, it still required more refinement and an additional statistical analysis.
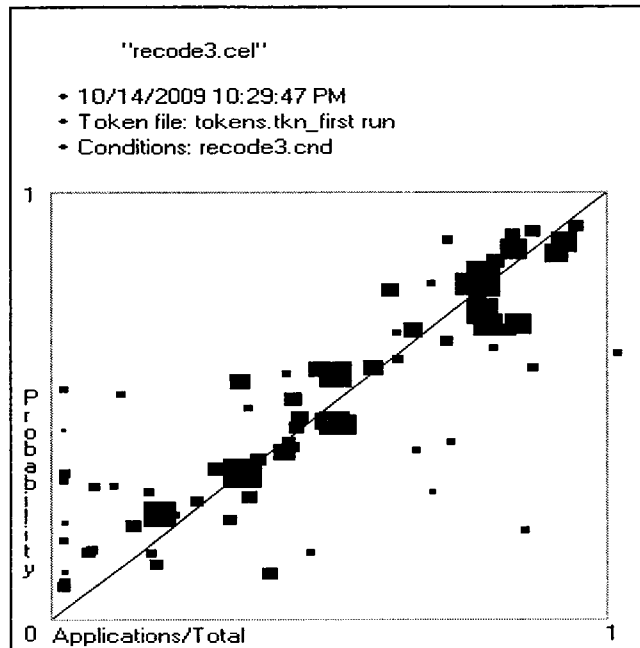
Figure 9: Binomial one-level scattergram from the third Goldvarb run: An improved fit.

Although there were virtually no changes from the second to the third recode regarding the factor groups that were found to interact (*MOA, Word Class*), results did confirm, however, the significance of the *Group Status* factor group. Particularly, the older generation of battery natives (BNO) overwhelmingly used the less prestigious [d] over the younger battery natives (BNY) regardless of being absent from the community (BNOA) or present in the community (BNOP). Across the four groups, the BNOA group had a factor weight of .69 (68%), followed by the BNOP group with a factor weight of .60 (65%), then the BNYP at .48 (52%) and finally, a factor weight of .36 (43%) for the BNYA group. Aside from the BNOA group having a slightly higher factor weight than that of the BNOP group, these results closely mirror the continuum that was hypothesized in the author's previous Battery research (see Figure 4 in

Chapter 2) as well as in the current study's methodology (see Figure 5 in Chapter 3), which will be addressed further in the discussion.

Despite the significant *Group Status* results, the fit of the model still showed a need for refinement, which prompted an additional recode. Keeping all of the remaining factors constant, in this fourth Goldvarb analysis, *Group Status* was purposely eliminated so that *Gender* could be examined without the inherent interaction with *Group Status*. Results from the binomial one-level are shown via the scattergram in Figure 10 below.
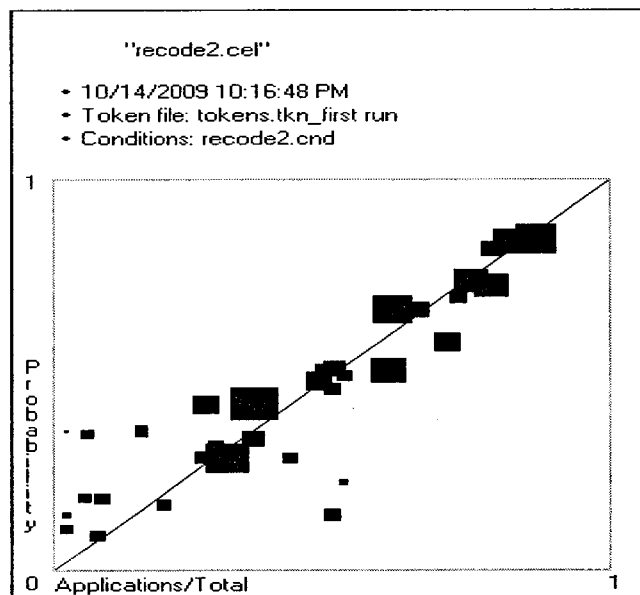
Figure 10: Binomial one-level scattergram from the fourth Goldvarb recode.

By looking at the scattergram alone, it is evident that *Gender* was a more reliable social grouping than *Group Status*. In addition, there was little change in the other factor groups included in this study (e.g., all factor weights favoring /ð/-stopping in the first two recodes remained as such in this particular run). The following table is a summary of the final statistical results obtained in the analysis

of variable /ð/-stopping in the variety of Newfoundland English under

investigation.

Table 4: /ð/-stopping in the Battery Dialect: Final Results

Factor Groups	Factor	Weight	%	N
MOA	Nasals	.23	31	249/792
	Voiceless frics	.45	47	110/234
	Voiced stops	.64	61	137/225
	Pause	.49	53	305/575
	Voiceless stops	.68	75	440/589
	Vowels	.67	63	468/741
	Liquids	.67	71	270/381
	Voiced frics	.27	33	84/258
POA*	Labials	.59	56	97/172
	Dorsals	.53	57	96/170
	Coronals	.45	51	1097/2137
	Vowels	.67	63	468/741
	Pause	.44	53	305/575
Word Position*	Word Initial	.52	55	1903/3465
	Word Medial	.35	49	160/330
Word Class	Lexical	.23	46	120/263
	Function	.52	55	1943/3532
Group Status*[10]	BNOA	.69	68	266/393
	BNOP	.60	65	615/942
	BNYP	.48	52	432/1013
	BNYA	.36	43	450/1447
Gender	Men	.57	60	1304/2163
	Women	.41	47	759/1632
Formality	Informal	.57	60	1892/3179
	Formal	.21	28	171/616

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[10] For the sake of completion and, more importantly, because reference will be made to these final results in the discussion section, the factor groups *POA, Word Position* and *Group Status* (marked by "*") are illustrated in table 4 although they were not included in the fourth Goldvarb run. Their final statistical results were included here from the last Goldvarb run in which they were included, the third run.

Table 4 shows that of the *MOA* factors, the voiced and voiceless stops as well as vowels and liquids preceding /ð/ garner the highest incidences of [d] substitution. The only *MOA* factor that changed enough to fall below the 0.50 threshold favouring the [d] were voiceless fricatives, which had a factor weight of .50 in the previous run but only stood at .45 in the final run. Final results for the *POA* factor group show that vowels, labials and dorsals favour the application of /ð/-stopping for the twelve Battery participants. Regarding the factor group *Word Position*, word-initial environments prompted the use of [d] as did function words for the factor group *Word Class*. For the factor group *Formality*, the use of [d] was favoured in informal speech significantly more than in formal speech. The social grouping of *Gender* illustrates that men significantly use [d] more frequently than women. As shown with the elimination of some interactive factors groups, most of the remaining results did not change from the various recodes, and if there was a change it was not enough to disfavor the production of the [d].

This section has detailed each of the Goldvarb runs and recodes needed in order to refine the model of variation observed in this investigation. In addition this section has shown that the variable production of /ð/ is motivated by a set of linguistic and social factors. The linguistic factors that had a significant effect on /ð/-stopping included *POA, MOA, Word Position,* and *Word Class*. The social factors that had the most influence on the variable production of [d] were *Gender*

Group Status and *Formality*. In the following section, a discussion of these results will be provided[11].

4.3. Discussion of results

Due to the exploratory nature of this study, there were a large number of factors included in the analysis. For that reason, there were no clear and defined hypotheses regarding *each* factor group. Aside from the hypothesis that groups would mirror the anticipated continuum in Chapter 3 (a decrease in /ð/-stopping would occur by generation, residence and network affiliation), there was simply a broad methodological question as to which factors would prove relevant for variable /ð/ production, based on well-established hypotheses from sociolinguistics and phonological/phonetic theory. The following sections will discuss the results in terms of the linguistic as well as the social factors included in the study.

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[11] There was, in fact, a fifth run performed to focus on the [assim] factor. However, because this phenomenon has no bearing on the production of [d], the results were not focused on in the results chapter, nor will they be elaborated on in the forthcoming discussion. Nevertheless, the binomial up and down analysis to uncover the factor groups with the greatest strength of favouring [d] showed that only *Formality* and *MOA* were revealed as significant. For *MOA*, nasals had a factor weight of .96 (52%), voiced fricatives at .83 (16%) and voiceless fricatives at .54 (4%). This may possibly be due to words such as "and" [ænd] being reduced to [æn] and the following /ð/ being assimilated to the preceding /n/: /ænd.ðə/ → [æn.nə]. For the factor group *Formality*, informal speech produced a factor weight of .59 (16%) compared to formal speech which had a factor weight of .14 (2%), which confirmed that more attention is paid to 'proper' pronunciation during more formal speaking situations.

4.3.1 Linguistic factors

From a phonological perspective, the results obtained for the *POA* and *MOA* factor groups were inconclusive as there were no observable patterns based on natural phonological classes or phonetic phenomena. Let us start with a discussion of the results involving *POA* which was included in order to comprehensively investigate the application of /ð/-stopping, and not because it was thought to have an effect on the phenomenon, since the two /ð/ variables share the exact same articulator: the coronal node. As described earlier, this factor group included preceding labials ([p, b, m, etc.]), coronals ([t, d, n, l]), and dorsals ([k, g, ŋ, vowels]) as well as pause[12]. It remains unclear why vowels (.67), labials (.59), and dorsals (.53) favoured the [d] variant in this study, while coronals had the opposite effect with a meager factor weight of (.45). In sum, whatever *POA* analysis is proposed for the coronal [d] variant can also be extended for the other coronal [ð].

With regards to *MOA*, there were also no discernable patterns based on the final results. For instance, it was initially hypothesized that forms that share the continuancy feature with /ð/, that is liquids, fricatives and vowels, would facilitate the production of the more standard [ð] because they share the [+ continuant] feature. Conversely, it was also predicted that the *MOA* factors characterized by a [- continuant] feature such as stops and nasals would disfavor the production of

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[12] As alluded to earlier, the 'pause' factor was also included in the *MOA* factor group simply to ensure it was accounted for (although for both, the factor weights did not favour the production of [d] at .44 and .49 respectively). It is acknowledged that pause does not have either a place or manner of articulation.

the [ð] variant, as there would be instability in continuancy between the [-continuant] stop or nasal and the following [+continuant] [ð]. For ease of exposure, Table 5 displays the distribution of the feature [continuancy] across the five *MOA*s considered in this study.

Table 5: *MOA Preceding Environments and Continuancy*

[+ Continuant]		[- Continuant]	
Liquids			
Fricatives	([ð])	Stops	([d])
Vowels		Nasals	

This hypothesis based on continuancy can be explained from an ease of articulation perspective: preserving manner (i.e., the continuancy feature – e.g., "spi[l] [ð]e") can be assumed to be comparatively easier than producing two consecutive sounds that differ in continuancy (e.g., ha[d] [ð]e). In this study, the *MOA* factors that favoured [d] production were stops (both voiced (.64) and voiceless (.68), vowels (.67) and liquids (.67), which do not all conform to the predicted pattern. Moreover, of the segments that favoured the production of [d], vowels and liquids are at one extreme on the sonority scale (highly sonorous) while voiced and voiceless stops are at the opposite extreme (the least sonorous). These unpredictable results led to ruling out the potential effect of sonority on the output of [d], as predicted by one of the corollaries of the Sonority Sequencing Principle (Hooper, 1972; Clements, 1990). For example, it could be hypothesized

that the best contact between two syllables is one in which the preceding segment

is highly sonorous (a vowel, liquid or nasal) and the following onset is low in

sonority; e.g., spi[l] [ð]e would be preferred over ha[d] [ð]e because the sonority

gap between [l] and [ð] in the former example is wider than that between [d] and

[ð]).

For the factor group *Word Class,* function words favoured [d] usage (.52;

55%) over lexical words (.23; 46%). Dubois & Horvath (1999) also found similar

results in their study on /ð/-stopping in the speech of Creole African American

vernacular English (CAAVE), namely that function words favoured a higher

usage of [d] (87%) as opposed to lexical words (33%). The likelihood that

function words promote greater use of the [d] variant over [ð] can be explained by

looking at the *functional hypothesis* (Kiparsky, 1972). The *functional hypothesis*

predicts that forms that carry semantic meaning (i.e., content words) are more

likely to be preserved than those that do not (e.g., function words such as the

definite article "the"). In the case of the function word "the", for instance, it is

likely that the form would undergo /ð/-stopping simply because it does not carry

any function in the language besides that of a definite marker.[13] In addition, the

interdental in the word "the" is not contrastive inasmuch as it does not distinguish

words in English (there's no "de" equivalent in the language; cf. "they" versus

"day"). A related explanation has also been suggested in the phonological

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[13] Function words such as the definite article "the" are not universal and, accordingly, they are absent from some languages such as pidgins and Creoles, and in early first language speech.

literature via a positional constraint that is highly operative across languages: FAITH-Lex, a constraint that favours the presentation of features in lexical words (e.g., Trubetzkoy, 1939; Casali, 1997; Pulleyblank, 1997). Accordingly, this constraint expresses the cross-linguistic tendency for preserving information contained in lexical words rather than in function words.

Bybee's (2001) notion about the role of frequency effects in language has a similar prediction with regards to "the". In her view, it is assumed that forms that are highly frequent (and therefore highly predictable) in the language are more likely to undergo changes such as /ð/-stopping: their change (deletion or stopping in this case) does not lead to a communicative breakdown, so speakers simply substitute [d] because they know that the loss of /ð/ will not cause a lack of understanding. In the current study, there was an overwhelming number of function words as opposed to lexical words (3532 versus 263 respectively) as well as word-initial against word-medial /ð/ words (3465 versus 330 respectively). This highlights the sheer number of function words as opposed to lexical words in everyday conversation

Regarding the factor group *Word Position,* word-initial environments favoured the production of [d] (.52; 55%), whereas word-medial /ð/ did not (.35; 49%). Due to the high interaction between the factor groups *Word Position* and *Word Class,* it was expected that the results of these two variables would be relatively equivalent because there were no significant changes over the course of the analyses when one was not included. In addition, they were also comparatively similar in both their percentages and factor weights.

4.3.2 Social factors

Based on prior sociolinguistic research, it was speculated that in terms of gender, women would be more conservative in their use of the /ð/ variable, thus favouring the more prestigious [ð] variant (e.g., Wodak & Benke, 1997). Accordingly, men would use the social identity marker [d] more frequently, whereas women would use the standard [ð] more frequently. In the results obtained, the males did use the [d] variant overwhelmingly more than females, with a factor weight of .57 (60%) versus that of females at .41 (47%). Similar patterns have been confirmed in other sociolinguistic studies (Labov, 1966; Lippi-Green, 1989; Milroy, 1980; Trudgill, 1972) and specifically in those conducted in a variety of communities across Newfoundland (e.g., Clarke, 1985; Colbourne, 1981; Reid, 1981).

Why this phenomenon occurs in the twelve people from the Battery can be explained by examining the gender roles of this community. It is likely that women tend to be more conservative with their use of the vernacular because of their different occupational roles from that of the males. Until the past few decades, men have typically always worked in the fishing industry in various capacities and women have traditionally been the primary caregivers in the home looking after their children. This is definitely the case for the older Battery natives in this study, where two of the three older female Battery natives never worked outside the home whereas only one did. In addition, the two older male Battery natives worked in the fishing industry and come from families where fishing goes back generations. On that note, because the men all worked together, there may

have been more pressure for them to exert their solidarity through vernacular forms (e.g., Eckert, 1989; Trudgill, 1972). For instance, it could be the case that because the Battery was socially segregated from the rest of St. John's and its residents were often stereotyped negatively, the men felt the need to exert their unity both within and outside the community by increasing their vernacular speech. In the present Battery era, the stigma of the *old* Battery still lingers, which may be why younger men continue to use the identity marker [d] more than women. This relates to Trudgill's (1988) notion of "covert prestige" where it is essentially more crucial for men to use vernacular speech because of its potential social value.

Even though the younger generation of Battery natives does not abide by the same conventional gender roles as the older generation did, they were all raised in such households. Thus, there is still some semblance of the traditional gender roles found with the younger generation of community members. It was found that the younger generation of Battery women did make the choice to stay home for a number of years to raise their children, and the younger generation of Battery men in this study has similar occupational roles as the previous generation, as general labourers. A number of the men still do work together, as one Battery native explained that there are about half a dozen current natives that work together at a shop in St. John's.

Looking at the effects of formality on /ð/-stopping, it has been widely accepted in standard sociolinguistic research that, with regards to formality, less prestigious forms are likely to occur more frequently in informal stylistic

environments. As discussed in the previous section, this is exactly what happened

with the variable phenomenon of /ð/-stopping, in which [d] usage increases in less

formal speech (in this study characterized by free conversation). Moreover, there

were only two types of style from the style continuum explored because it was

speculated that some of the older natives might not be able to read and that some

participants may be unwilling to complete tasks of this nature. Although this was

the case because five participants did not take part in the reading task for various

reasons, results confirmed that the non-standard variant [d] is favoured in

informal rather than formal speech (with factor weights of .57 versus .21

respectively). This finding corresponds to the results of other sociolinguistic

studies that looked at speech style (e.g., Eckert, 1989; Trudgill, 1983).

There is evidence that there were noteworthy interactions between the

factor groups *Formality* and *Gender*. Figure 11 shows that in informal speech, the

six men and six women in the study had high (and relatively comparable)

percentages for their use of [d] at 64% and 54% respectively[14]. However, there

was a substantial difference in formal speech, with men using the [d] in 42% of

the words and women using the same variant only 9% of the time. It is important

to note that of the twelve participants, three females and two males did not do the

more formal reading task, leaving only seven participants (three females and four

males) having participated in that portion of the study. It is acknowledged that this

might have possibly skewed the results and that the factor group *Formality* is less

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[14] Because these results derive from the cross tabulation of two factor groups, the
values provided in the discussion are in percentages.

reliable based on the unbalanced number of participants who took part in the reading task.

Gender and Formality
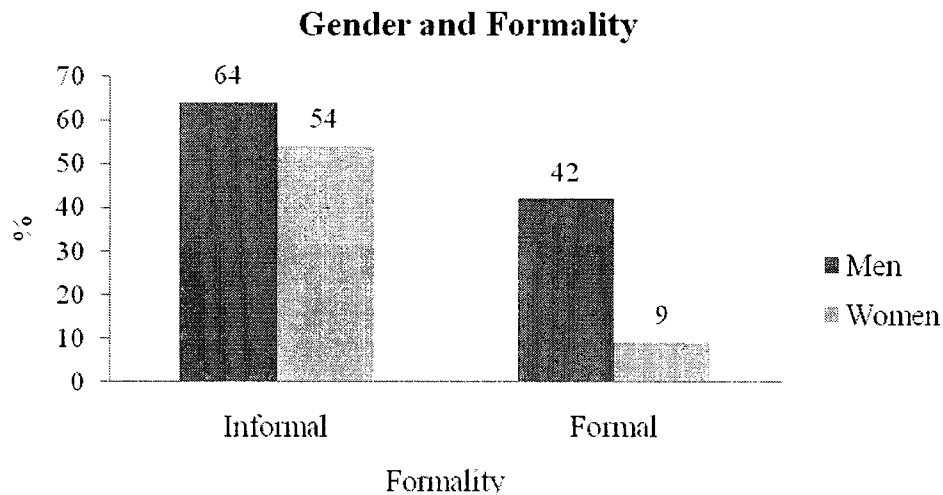
Figure 11: /ð/-stopping by gender and formality.

In addition, there appeared to be an interesting relationship between *Gender* and *Word Class*. There was a large difference in their percentage of [d] usage in function words for males and females (60% versus 48% respectively). However, there was a significantly larger difference between males and females with respect to the use of [d] in lexical words, with 67% of males' lexical words using the localized variant compared to that of only 23% of the females' lexical words. This stark difference illustrated in Figure 12 shows that the women of both generations included in this study, may have potentially made more of an effort to pronounce lexical words with greater caution or concern with mirroring the standard /ð/.

Gender and Word Class
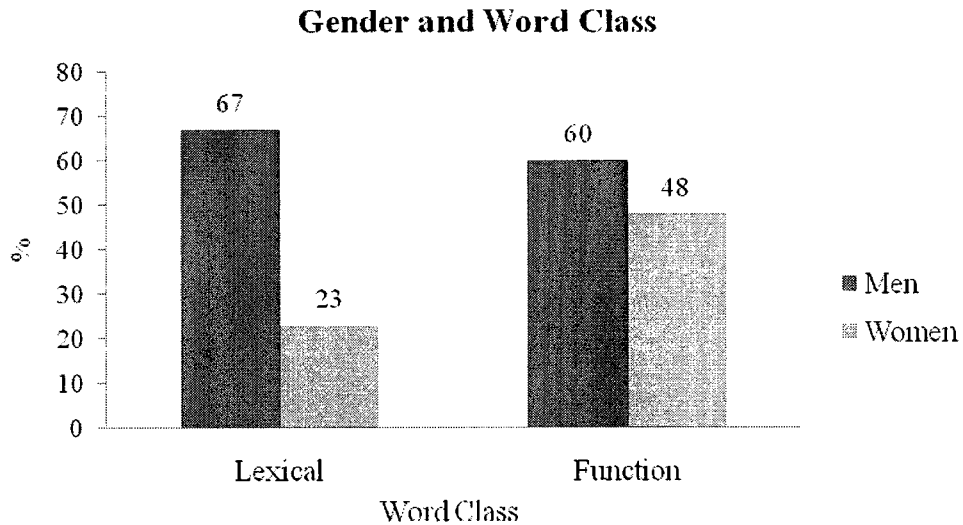
Figure 12: ð/-stopping by gender and word class.

Turning now to the *Group Status* factor group, it was hypothesized in this study that the use of the less prestigious [d] would vary depending on one's status within the community. The use of [d] would decrease from the speech of the older Battery natives to that of the younger Battery natives, demonstrating an intergenerational shift. In addition, it was expected that the decrease in their use of [d] would also be evident between groups living outside of the community as opposed to those that have remained in the community so that the use of [d] decreases from BNOP to BNOA to BNYP to BNYA (see the continuum illustrated in Figure 5). This hypothesis was motivated by the *weak tie model* (Milroy, 2002), which posits that the most mobile individuals have weak ties, and "…as a consequence of their mobility, occupy a position marginal to any given cohesive group, [and] are in a favourable position to diffuse innovation" (p. 219). Thus, it was anticipated that each participant's questionnaire responses would

determine their *Social Network* and *Social Identity* and, accordingly, there would be a move towards a more standard speech of the weak members, those with a periphery status.

The factor group *Group Status,* however, posed a number of problems in the analyses and proved to be an unreliable independent variable. The BNOA group only contained one individual, a male, which may explain that his tendency to use [d] more frequently than the BNOP group (which contained three women and one man), was possibly based on gender and not his group status. Accordingly, the group status classification itself is questionable because even though the BNOA participant has lived outside of the Battery for almost 30 years and raised his family in St. John's, he still frequents the area on a daily basis to "escape the city life of St. John's". The sole participant representing the BNOA group still owns and maintains what was once a twine store in the Outer Battery area, where fisherman came to repair their nets. It can now be characterized as a quaint museum of sorts, fully equipped with guest book, its own line of postcards and numerous mementos from the generations his family worked in the fishing industry. Based on my conversation with the BNOA participant, it was obvious that this participant is as connected to this community as anyone else in the area, which was also evident by his classification as having a closed social network and a community-based identity. Another problematic feature of the group classifications is that in the BNYA group, the sole male participant lives in close proximity to the Battery. More interesting is the fact that he has not worked for most of his adult life and spends an overwhelming amount of his time in the

Battery vicinity, sharing many of the same characteristics as other BNYP group members.

In general, *Gender* proved to be a more stable social factor group than *Group Status*. For instance, one's gender was presumably not subjectively decided upon as was *Group Status*: each participant was categorized as male or female without question. In addition, gender was evenly distributed in this study such that there were six males and six females as opposed to *Group Status* which had four groups and an uneven distribution of participants in each of the respective groups. The classifications of absent versus present might have been unfruitful based on the imbalance of gender as well as the subjectively derived concepts of group affiliation and contact. However, the intergenerational differences found in /ð/-stopping were still quite evident based on the factor weights of [d] usage in the second Goldvarb recode and the percentages of usage, as is illustrated in Figure 13.

Group Status and [d] Usage
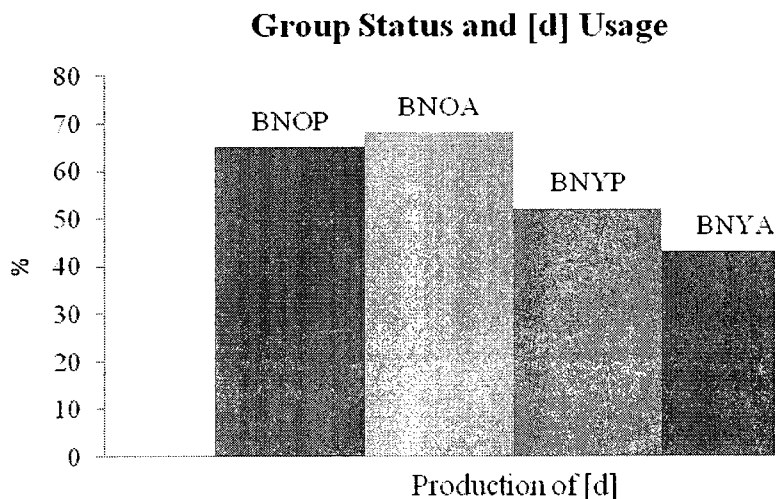
Figure 13: /ð/-stopping by group status.

The elimination of the factor groups *Social Network* and *Social Identity* warrants further explanation due to their theoretical significance in this study yet lack of significance in the Goldvarb analyses. At the conception of this study, one of the goals was to take a comprehensive look at the Battery community and investigate the community networks, social identities and dialect of this once socially isolated community. The assumption that the breakdown of the *old* Battery community and relocation of some of the natives would potentially affect the network strength and individual identities was disproven. Of the twelve participants, only two (one BNOP and one BNYA) were categorized as having neutral social networks and social identity. The other ten participants were categorized as having closed social networks and community-based identities. None of the participants were categorized as having open social networks or individually-based identities.

The two classifications *Social Network* and *Social Identity* were determined based on items on the questionnaire. Adapted from Milroy's (1980) *Network Strength Scale*, participants were asked a series of questions (18 in total) based on five conditions of network strength and affiliation and subsequently grouped into having either an open, closed or neutral social network. All but two participants (one BNOP and BNYA) were characterized as having closed social networks, defined briefly as a network consisting of high interaction and affiliation with others from the community. Consequently, these Battery natives showed that their bond with other natives from the community remains strong despite the gentrification of the community and change in social structure. The

factor group social identity was based on Tajfel's (1978) *Social Identity Theory* and takes into consideration the four major characteristics of social identity by having two statements relating to each characteristic which were to be rated on a Likert scale. Similarly then, these same two participants were both categorized as having a neutral social identity as opposed to all the other participants having a community-based identity, defined briefly as one who has a strong personal identification and connection with others from the community. As a result, this possibly indicates that identity, for the ten out of the twelve Battery natives, includes and integrates the community and its members.

The BNOP individual with the two classifications in question was not born in the Battery and spent the early part of her formative years in a small town outside of St. John's. Although she married a Battery native, raised her four children in the community and still lives there after more than 40 years, interestingly, she considers herself less "native" than many of the other older community members. Moreover, the BNYA male with the same two classifications revealed he had a somewhat tumultuous childhood which may have potentially caused his social network and identity to be compromised and become less stable as those of the other participants. While the factor groups *Social Network* and *Social Identity* were proven less useful when looking at them in terms of the stratification of /ð/, they were seen as ideal in terms of analyzing this community and its members as being part of a cohesive unit, regardless of residence. In brief, the factor group *Group Status* did not appear to hinder the level of connection to the Battery community as it was initially hypothesized. In

the same way, *Social Network* and *Social Identity* were not linked to residence and consequently one's *Group Status* as was speculated, nor did the two factor groups determine the amount of /ð/-stopping. Although S*ocial Network* and *Social Identity* were not significant from a quantitative perspective, it is believed that they did lend merit to the study from a qualitative perspective.

One of the final questions asked of the participants was whether or not they thought they had a unique dialect, different from other people (i.e. Mainlanders, other areas in Newfoundland). Interestingly, all twelve of the participants did agree that they possess a distinct dialect. When asked if they were aware of their use of the [d] for the /ð/, again, all participants responded that they were indeed aware of that feature in their speech. Specifically, speakers 1, 3, 4, 8 and 9 provided extensive and unique commentary about their dialect. Comments included that they thought they "talk Irish", "all speak like each other", "talk too fast for Mainlanders", and even that they "sound different than people from St. John's". With respect to the use of the non-standard [d], one of the more colourful comments included "we can't be bo[d]ered to pronounce [d]at sound". When asked if there were other speech differences of which they were aware, a number of participants acknowledged putting 3[rd] person morpheme –s on 1[st] person verbs, "I loves it" as well common sayings unique to Newfoundland such as the frequently heard "whadda y'at" and "yes, b'y". This line of questioning was not used for statistical analysis; it was merely broached to uncover the native perceptions, if any, of their dialect.

With a plethora of factors and factor groups to work with, there were noticeably a number of Goldvarb runs and a host of methodical issues to address during the analysis. Furthermore, it is acknowledged that there are presumably a host of additional intervening variables not investigated here that play a part in the speech of the Battery natives. However, the results obtained clearly showed a number of significant factors that emerged as contributing to the variable phenomenon of /ð/-stopping for the twelve community members, both extralinguistic and linguistic in nature.

CHAPTER 5: CONCLUSION

5.1. Concluding remarks

The change in the social structure of Newfoundland as a whole has been somewhat mirrored on a micro level in the Battery community. Because of the complexity of this changing community, one of the aims of this study was to investigate whether the Battery natives would pattern like enclave community members in low-status communities or like those living in heterogeneous areas where there is much greater exposure to Standard dialects. The focus of this study was to look at this changing community and uncover what defines the *new* Battery era with respect to community structure, identity and dialect.

While it was a general goal to discover what extralinguistic and linguistic factors would trigger the production of the two variants of /ð/, it was a specific goal to see how this behaved across the four Battery groups under investigation, namely BNYP, BNYA, BNOP, and BNOA. Although some of the findings were less than ideal in terms of reliability (see forthcoming discussion), there were numerous results that were quite interesting. The most unexpected results were the significant factor weights and percentage differences in the use of [d] in terms of gender and how the two genders patterned with respect to formality (specifically in formal speech) and word class (specifically in lexical words). The stark differences in formal speech and specifically with lexical words highlights just how different the genders are in terms of [d] production, or perhaps more importantly, *lack* of [ð] production. While men used the [d] variant less in their

formal speech, exhibiting that it is common to be more standard in formal speech, women exhibited *much more* careful speech in a formal reading task.

There were some intriguing findings with *Group Status* although this factor group was somewhat capricious. It was believed that due to the change in social structure and mobility of the younger Battery generations, stratification would most likely occur within the two groups of younger natives (BNYP and BNYA over BNOP and BNOA). It was further speculated that not only would the younger groups display less /ð/-stopping, but those participants who have remained in the community would have a stronger link to the core community network. It was shown that the seven participants from the younger generations (BNYP and BNYA) did in fact use the [d] social marker less than the five older participants (BNOP, BNOA). However, it was a pleasant surprise that the latter prediction regarding community affiliation and residence was not supported. The large majority of participants (ten out of twelve) still identified strongly with the Battery community network and Battery identity, regardless of where they lived. It appeared that weak ties in the physical sense had no bearing on the emotional ties that these community natives shared, despite what they might have thought at a younger age when they initially left. Despite the problematic aspects to *Group Status*, further study with a greater number of participants for each group may resolve some of the challenging issues and lend more credibility to the factor overall.

The linguistic results of this study were less than ideal, mainly in terms of confirming the initial hypotheses regarding the *MOA* and *POA* factor groups:

there were no observable patterns that fit with pre-existing theories proposed for the analyses of phonological phenomena. For example, the expected results for *MOA* were not confirmed because there was no observable pattern based on continuancy. In addition, there was little expectation for the *POA* factor group because both /ð/ and its variant [d] have the same place of articulation. The picture was more promising for the remaining linguistic factors included, namely *Word Position* and *Word Class*. Results for both confirmed typical outcomes from other sociolinguistic studies, whereby the word-initial /ð/ segment undergoes [d] substitution more frequently than when it appears word-internally. In addition, *Word Class* followed a similar predictable pattern showing that function words are more likely to undergo /ð/-stopping as opposed to lexical words. As detailed earlier, this phenomenon may be explained via the *functional hypothesis* or the *frequency effect,* both of which have been confirmed in other studies of a similar nature. Despite some of the inconclusive conclusions, the results, indeed, confirmed that the application of /ð/-stopping is motivated by both linguistic and extralinguistic factors. Accordingly, the phenomena of /ð/-stopping proves to be present in the unique Battery community as it has been in other areas of Newfoundland. Since the future of the Battery is in question due to the changes in both the social and physical structure over the past few decades it remains, for the time being, an ideal community for dialectal research.

5.2. Limitations

By far, the greatest limitation of this study was the small number of participants. Although twelve is an adequate number to study certain linguistic phenomena under special conditions (e.g. small speech communities), the fact that there were four groups under investigation meant that each group was only made up of a few individuals. It would have been ideal to have more participants overall, but specifically for each group observed to have more representation. This would allow for the results to be more reliable, thus making them more generalizable to the community as a whole, as well as other comparable communities across Newfoundland.

As stated in the results section, another limitation of this study was that not all of the participants completed the formal reading task. Two BNY and three BNO did not participate in the formal reading task, leaving only five BNY and two BNO to be measured by this factor. Reasons for not completing the task ranged from an inability to read, not having reading glasses on hand and, in one case, simply refusing to do it for unknown, unstated reasons. This issue was anticipated in the conceptualization of the study, which was partly why the questionnaire was read to the participants, which they answered orally.

A more general limitation commonly found with linguistic studies in general is the possibility of there being a number of intervening variables that could potentially affect the speech patterns of some or all of the participants. *Observer's Paradox* is a common hindrance found with sociolinguistic interviews; despite having a friendship with a Battery community member which

allowed access to the community, there was no sure way to safeguard against interviewer presence alone skewing the results (Labov, 1972). Consequently, some of the participants might have felt the need to converge to an accent similar to a more standard variety as a sign of accommodation. On the other hand, some participants may have accentuated their non-standard dialect as a way to diverge from a more standard speech style and show more of their distinctiveness. On the same note, each participant undoubtedly has their own idiolect which can be as unique and irreplaceable as the Newfoundland dialect in general.

5.3. Future research

For further study in this area, it would be interesting to study the next generation of Battery natives. Although this younger generation would presumably not have grown up in the 'old' Battery era, it would be appealing to see how they pattern in terms of network affiliation, social identity and use of the social marker [d]. For example, in another well known study looking at changing communities and the strength of social networks, Dubois & Horvath (1999) looked at a third generation of their community of interest. What they found was a distinct V-shaped pattern, whereby the third generation identified with the older generation, possibly to showcase their pride in their heritage despite not living in the area when it was a socially isolated and marginalized community.

Additionally, it would be ideal to include, in a future study, participants from the Battery who live outside of the community and do not share any community bonds nor have any good feelings about being from the community. Of all the participants interviewed, there was only one who confirmed that they

had a family member who had negative feelings about being from the Battery and did not even like to visit the community. Of course, the most important reason for future research in the Battery is that the spate of gentrification and urbanization affecting this community is becoming increasingly evident as time goes on. It is imperative that more community members are interviewed, especially those older Battery natives that will likely be gone in the decades to come.

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APPENDIX A
CONSENT FORM

This is to state that I agree to participate in a program of research being conducted by Maia Williamson of the Department of Education (TESL Centre) at Concordia University.

Contact information: **E-mail:** maiawill@education.concordia.ca **Phone:** 514.656.1979

A.   PURPOSE

I have been informed that the purpose of this research is to study the use of English by members of the Battery community of St. John's, NL.

B.   PROCEDURES

I have been informed that (1) this study will take place at a mutually agreed upon location; (2) the tasks I will be asked to complete consist of answering questions on a questionnaire and one reading aloud task; (3) the oral interview and reading aloud task will be audio-recorded; and (4) the total session will last approximately one hour.

C.   CONDITIONS OF PARTICIPATION

- o   I understand that I may decline to participate in the experiment without any negative consequences.
- o   I understand that I am free to withdraw my consent and discontinue my participation at any time without negative consequences.
- o   I understand that my participation in this study is confidential (i.e. the researcher will know but will not disclose my identity).
- o   I understand that the data from this study may be published or presented at a scientific conference; data will be reported in a way that protects each participant's identity.
- o   I understand that if I request a copy of the final research report, one will be sent to me. I can make this request to during this interview or later in writing.
- o   I have a copy of this agreement.

I HAVE CAREFULLY STUDIED THE ABOVE AND UNDERSTAND THIS AGREEMENT. I FREELY CONSENT AND AGREE TO PARTICIPATE IN THIS STUDY.

NAME (please print):   _____

SIGNATURE: _____

RESEARCHER SIGNATURE: _____

DATE: _____

If at any time you have questions about your rights as a research participant, please contact Adela Reid, Research Ethics and Compliance Office, Concordia University, at 514.848.2424 – ext. 7481, or by e-mail at areid@alcor.concordia.ca.

APPENDIX B:
INTERVIEW QUESTIONNAIRE

Part 1: *Biographical Information*

1. Age: _____

2. Gender: ( ) Male ( ) Female

3. Where were you born?

4. Where did you grow up?

5. Where do you live now (ex. what part of St. John's or in the Battery)?

6. If you live outside of the Battery, how long has it been since you lived there?

7. What is your occupation?

8. What is (was) your parents' occupation?

9. What is your highest level of education?

10. Where did you attend school (elementary school/ high school)?

11. What is your parents' highest level of education?

12. Where did they attend school (elementary school/ high school)?

13. Where does your family come from (ex. Canada, Ireland, England etc)?

14. What religion does your family follow?

Part 2: *Battery Community Information*

15. How do you think the Battery has changed over the last few decades?

16. What do you see as the main causes of this change?

17. What do you think of the growing number of tourists and mainlanders in the Battery?

18. What do you like most/least about living in the Battery?

19. What do you think the Battery will be like in the next 20 years?

Part 3: *Based on Network Strength*

- *Membership of a high-density territorially based cluster.*

20. Did the people that live in the Battery all know each other?

21. Do the people that currently live in the Battery all know each other?

22. When you were growing up did you socialize with people from the Battery more than people from St. John's?

23. Do you currently socialize with people from the Battery over people from St. John's?

24. Can you tell me 5 (or more) of the most well-known Battery Family names?

- *Having substantial ties of kinship in the neighbourhood (more than one household).*

25. How many of your family members lived in the Battery when you were growing up? (Within the same house, and in different houses).

26. How many of your family members still live in the Battery? (Within the same house, and in different houses).

27. How many of your close friends lived in the Battery when you were growing up?

28. How many of your close friends currently live in the Battery?

29. Did you have a strong connection/relationship with others within the Battery community?

30. Do you have a strong connection/relationship with others within the Battery community as a child?

31. Were the families in the Battery typically close (i.e. spend time together, have a relationship)?

32. Are the families in the Battery typically close (i.e. spend time together, have a relationship)?

- *Working at the same place as at least two others from the same area.*

33. Did you ever work at the same place as any others from the Battery?

34. Do you work at the same place as any others from the Battery?

35. Did your father work at the same place as any others from the Battery?

- *The same place of work at least two others of the same sex from the area.*

36. Did others from the Battery (other male community members, members of the same family) tend to work at the same place as any others from the Battery?

- *Voluntary association with workmates in leisure time. This applies in practice only when three and four are satisfied.*

37. *If applicable:* Outside of work, do the men that work(ed) together spend time with one another?

Part 4: *Based on Identity*

Indicate the degree to which each of the following statements accurately reflects how you feel:

1	2	3	4	5
strongly agree	agree	neutral	disagree	strongly disagree

38. I am proud of being from the Battery.

    1   2   3   4   5

39. I know a lot of history about the Battery.

    1   2   3   4   5

40. I think people from the Battery think differently than people from St. John's.

    1   2   3   4   5

41. I think people from the Battery are closer to their friends and family than people from St. John's are.

    1   2   3   4   5

42. I think people from the Battery have different value systems than people from St. John's.

    1   2   3   4   5

43. I think people that grew up in St. John's have had more opportunity than people that grew up in the Battery (jobs, education, employment).

    1   2   3   4   5

44. I think that people from St. John's look at people from the Battery as different than them.

            1   2   3   4   5

45. I think people from St. John's negatively stereotype people from the Battery.

            1   2   3   4   5

46. What do you think about the /ð/: it's use, by whom etc?

47. Can you recommend anybody else that I can talk to, interview?

APPENDIX C
READING PASSAGE

The famous author had just finished another play and prepared to show the play at the local theatre. My father, who was at that time directing the play, thought he should seek the author's advice on the scenery, costumes, or the lights. So he invited the author to help set the stage. In the beginning, he came to the studio only once in a while. But after that, he came a lot. Soon he was there every day, carefully watching the crew finish the set. At first, he offered his ideas only when my father asked him to, but before long he was giving advice all the time. Then, he began supervising the crew himself, and it was clear that he was bothering everyone.

He wanted the scene where the main characters hold hands while watching the sunset to be perfect. So he spared nothing to achieve this effect and instructed the crew about what to do all the time. They worked hard to produce the effect he desired. They had to replace the curtains several times to choose the right colour background for the sunset scene. He was also telling the lighting technicians to try different lighting combinations and would show them how to do it. At his request, these workers took the red lights from the high ceiling in order to attach them to the wall. They projected the lights from the seating area and from beside the stage. They shone the lights directly above the stage and beneath the curtains. Sometimes he directed the crew to dim the lights. At other times, he had to order them to flash the lights full blast. On his instructions, the crew took off the light covers to wash them. They wrapped the lights in cloth or hung them bare over the stage. They flooded the whole theatre with a soft light. They shed the brightest lights from under the stage. But still nothing satisfied the author. The effect he wanted was not there.

A month later, during rehearsal, he suddenly saw the effect he had dreamed of.

"Hold that!" he shouted to the men behind the stage. "Leave the lights alone. Don't move them. Don't touch them. Don't change them till I get there."

"I'm sorry, sir"—shouted the stage manager, running up the stage—"but this is impossible! We can't do that!"

"Why not?" asked the author." "Is there a problem?"
"Because the theatre is on fire, sir. That's the effect you're seeing now."

APPENDIX D
BATTERY PARTICIPANT INFORMATION

SPEAKER	1	2	3	4	5	6	7	8	9	10	11	12
GENDER	F	F	F	M	M	M	M	F	F	M	F	M
AGE	49	36	61	38	38	85	38	86	53	41	83	72
STATUS	BNYA	BNYA	BNOP	BNYP	BNYP	BNOP	BNYA	BNOP	BNYP	BNYP	BNOP	BNOA
JOB	CITY	HRDRSR	RETRD	CHEF	LABOUR	RETRD/FI	UNEMP	HSEWF	HOTEL	UNEMP	HSEWF	RETRD/FI
P.O.B	ST.J'S	ST.J'S	PLACBAY	ST.J'S	ST.J'S	BATRY	ST.J'S	BATRY	ST.J'S	ST.J'S	ST.J'S	ST.J'S
RELGN	RC	RC	RC	RC	RC	PROD	RC	RC	ANGLN	ANGLN	ANGLN	PROD

SOCIAL NETWORK CONDITIONS: FULFILLED *OLD* ERA/FULFILLED *NEW* ERA y = YES n = NO - = CANNOT ANSWER ? = UNSURE

	1	2	3	4	5	6	7	8	9	10	11	12
1	y/n	y/n	y/n	y/n	y/n	y/n	y/-	y/n	y/n	y/n	y/n	y/n
2	y/n	y/n	y/n	y/n	y/n	y/n	y/-	y/n	y/n	y/n	y/n	y/n
3	y/n	y/n	?/?	y/n	y/n	y/n	n/n	y/n	y/n	y/n	y/n	y/n
4	y/n	y/n	y/?	y/n	y/n	y/n	y/?	y/n	y/n	y/n	y/n	y/n
5	y/n	y/n	y/?	y/n	y/n	y/n	y/?	y/n	y/n	y/n	y/n	y/n
TOTAL /10	5&5 = 10	5&5 = 10	4&2 = 6	5&5 = 10	5&5 = 10	5&5 = 10	4&1 = 5	5&5 = 10	5&5 = 10	5&5 = 10	5&5 = 10	5&5 = 10

SOCIAL IDENTITY STATEMENTS: 1 STRONGLY AGREE ~5 STRONGLY DISAGREE

	1	2	3	4	5	6	7	8	9	10	11	12
1	1	1	1	1	1	1	1	1	1	1	1	1
2	2	2	3	2	1	1	3	1	2	3	2	1
3	1	1	3	2	1	1	3	1	2	3	3	1
4	1	2	3	2	1	1	3	1	1	2	2	1
5	1	1	3	2	1	1	3	1	2	2	2	2
6	5	3	4	4	5	1	4	2	1	5	3	5
7	1	2	2	3	1	2	3	2	2	1	3	1
8	2	1	3	2	1	2	3	1	1	1	1	5
TOTAL /40	14	13	22	18	12	12	23	10	12	18	17	17

APPENDIX E
FACTOR GROUPS AND CODING SCHEME

Independent variables	[ð] (r)	[d] (w)	[assim] (a)					
POA of preceding feature	Labial (l)	Dorsal (d)	Coronal (c)	Vowels (o)	Pause (p)			
MOA of preceding feature	Nasals (n)	Liquids (q)	Voiced Fricatives (f)	Voiceless Fricatives (t)	Voiced Stops (z)	Voiceless stops (s)	Vowels (v)	Pause (e)
Word Position	Word Initial (i)	Word Medial (m)						
Word Class	Lexical (x)	Function (u)						
Style	Informal (R)	Formal (F)						
Social Network	Open (O)	Closed (Z)	Neutral (U)					
Social Identity	Individually-Based (I)	Community-Based (C)	Neutral (E)					
Gender	Male (Y)	Female (X)						
Group Status	BNYP (P)	BNYA (A)	BNOP (S)	BNOA (T)				
Participant	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8) ...