

Sociolinguistic research with endangered varieties: The case of Louisiana French

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Abstract

This article outlines the differences in goals, methods and results that variationist researchers may encounter when exploring and/or documenting a threatened language variety, and underscores special considerations and aspects of the research program that linguists must work to control for when working with endangered varieties of Western languages. In particular, it examines questions and strategies for dealing with sparse data for longitudinal studies; fewer speakers for stratified samples; the inverse relation between linguistic fluency and age; social network constraints in small speech communities; literacy-centric exercises in oral language communities; and larger project protocols designed for stable linguistic communities. Throughout the paper, the collection and analysis of Louisiana French liaison data from 1939, 1977, and 2010 provide an application of the proposed methods.

Keywords: fieldwork, language obsolescence, variationist sociolinguistics, Louisiana French, liaison

Résumé

Cet article fait état des éventuelles différences – en matière de buts, de méthodes et de résultats – que peuvent rencontrer des variationnistes au cours de l’exploration et la documentation de variétés linguistiques menacées. L’article souligne les facteurs particuliers et les aspects d’un programme de recherche que le chercheur doit s’efforcer d’équilibrer, dans le cas de recherches relatives à des variétés menacées parmi les langues occidentales. Il examine notamment des questions et des stratégies en vue d’aborder les défis suivants : le manque de données robustes dans des études longitudinales ; le manque de locuteurs pour des échantillons stratifiés ; la corrélation positive entre l’âge des locuteurs et leurs compétences linguistiques ; les contraintes du réseau social dans des communautés langagières de petite taille ; les exercices nécessitant l’alphabétisme dans un contexte de transmission exclusivement oral ; et le besoin d’adapter un

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protocole de recherche conçu à l'origine pour des enquêtes auprès de communautés linguistiques stables. Le cas de la liaison en français louisianais, fondé sur la collection et l'analyse de données provenant de 1939, de 1977 et de 2010 sert d'exemple pour l'application des méthodes proposées à un projet de recherche actuel.

Mots-clés: le travail de terrain, l'obsolescence linguistique, la sociolinguistique variationniste, le français louisianais, la liaison

1. INTRODUCTION

As Weinreich noted in his seminal work on language contact, “a full account of interference in a language-contact situation, including the diffusion, persistence, and evanescence of a particular interference phenomenon, is possible only if the extra-linguistic factors are considered” (Weinreich 1974: 3). Necessarily, then, research on one of the results of language contact – language shift and obsolescence – must include sociolinguistic analysis. Since “[l]anguages can vary greatly in language endangerment situations, with potentially more kinds and greater frequency of variation than encountered in non-endangered languages” (Palosaari and Campbell 2011: 111), they are of particular interest to variationist sociolinguists. Fortunately, many recent publications detail field methods for linguists working with endangered language communities (e.g., Bowerman 2008, 2011; Austin and Sallabank 2011; Thomason 2015). There are also numerous resources that discuss sociolinguistic fieldwork in particular (e.g., Labov 1984, Krug and Schlüter 2013, Mallinson et al. 2013). The present article aims to single out the specific challenges that a sociolinguist may face when working with obsolescence in varieties of Western languages.

In particular, I outline the differences in goals, methods, and results that variationist researchers may encounter when exploring and/or documenting a threatened variety of a Western language, and underscore special considerations and aspects of the research program that sociolinguists must work to control for in a situation of language obsolescence. The methods section examines questions and strategies for dealing with sparse data for longitudinal studies; fewer speakers for stratified samples; the inverse relation between linguistic fluency and age; social network constraints in small speech communities; literacy-centric exercises in oral language communities; and larger project protocols designed for stable linguistic communities. The paper uses a real-time study of French liaison patterns in Francophone Louisiana as an example of the application of the proposed methods. Liaison consonants (most commonly /n, t, z/) can variably appear before vowel-initial words in certain grammatical constructions: for example, /z/ can appear in *mes amis* ‘my friends’ but not in *mes frères* ‘my brothers’.

Louisiana French is an obsolescing enclave dialect of French (Picone 1997). While Louisiana French speakers in more remote areas knew little to no English in the early half of the twentieth century (Guilbeau 1950: vi-vii), they are all fluent French-English bilinguals at present. Note that while the current study focuses on speakers of Louisiana French – also known as ‘Cajun’ French or Louisiana Regional French – there are other varieties of French spoken in Louisiana, such as

Louisiana Creole (Neumann 1985) and Plantation Society ('Colonial') French (Picone 1998).

2. DIFFERENCES IN MOTIVATION, GOALS, AND QUESTIONS

The following sections outline some particularities that sociolinguistic researchers may encounter when planning variationist work on an endangered variety of a Western language.

2.1 Motivation

In an obsolescing language variety, the driving force behind sociolinguistic research may be different in at least three ways from research in a healthy language community. First, it will likely not be possible for the endangered-language researcher to add to literature on the critical period or the transition between adolescence and adulthood (e.g., Cukor-Avila 2002, Wagner 2012, Rickford and Price 2013), since an endangered language is characterized by the cessation of transmission of the variety to children. Fluent Louisiana French speakers, for example, are generally over 60 years old; the youngest speaker in this case study was 58 when he was interviewed in 2010. Likewise, studies of intergenerational transfer may not be possible (but see Dubois and Noetzel 2005 for work with Louisiana French). However, endangered varieties do present interesting opportunities for research into language variation among working adults, retirees, and elders, potentially in the absence of normative language-internal pressures; this is the motivation for studying liaison in Louisiana French. Such research responds to a need for more variationist analysis in post-adolescent language variation and change (Eckert 1997).

Second, as with endangered indigenous languages, the researcher's position within and responsibility to the language community will likely be different from what it would be in a situation of linguistic stability (Dorian 2010). Naturally, all sociolinguists are called to give back to the communities they study (Wolfram 2013), but the variationist may be called to participate in and contribute to larger community efforts revolving around language revitalization and language rights, depending on the wishes of community members (Nettle and Romaine 2000). While this relationship is more involved and complicated, it can also be more rewarding and mutually beneficial than a traditional researcher-participant relationship: the linguist is in a position to contribute positively to the lives of those who are providing valuable sociolinguistic information, and can use social-scientific research to advocate for legislative and institutional support for the endangered language community (Dorian 1987). Such action can build trust between the language community and the researcher, facilitating longitudinal research and making a substantial impact outside of academia (see Good 2011 for details on language resource creation, and Rice 2006 for an overview of the ethics of endangered language documentation).

Third, the factors conditioning language variation patterns may not include the usual sociolinguistic factors of age, sex, socioeconomic status, or education (Dorian 1994); indeed, work with indigenous minority-language communities

suggests that clan, exogamy, gender-based access to prestige, and majority-language contact are also influential extralinguistic factors (Stanford and Preston 2009). In French-speaking Louisiana, however, common sociolinguistic factors appear to be active: some studies have found that sex and speech style are most important for explaining certain language variation patterns (Carmichael 2007, 2008; Blainey 2009, 2010) while others have found that age is the strongest explanatory sociolinguistic factor (Salmon 2007, 2009). Still others have reported geographically-based variation patterns (Baronian 2005, Dubois 2005, Dajko et al. 2008, Blainey 2015), and those examining questions of ethnicity have underscored its importance for language variation patterns in Francophone Louisiana (Dajko 2009, 2012)¹. As a result, it is important to consider all potential extralinguistic factors at the analysis stage. The case study of Louisiana French liaison included the sociolinguistic factors of sex, generation, speech style, and home town.

2.2 Goals and questions

Because of these potential differences in motivation, the goals and questions of variationist studies in threatened varieties of Western languages are also likely to be distinct from those of studies in vibrant language varieties. One line of questioning centres around the amount of variation that exists in obsolescing language varieties. Will research on threatened varieties of Western languages confirm that language endangerment consistently results in increased rates of language change, as asserted in Cook (1995) and O'Shannessy (2011), or will it show that different endangered language communities have different degrees of language variation and change, as put forward in Connell (2002)? If differing levels of variation are uncovered, it will be important to verify that the type of linguistic variable that is investigated (e.g., syntactic, morphological, phonological) and the study design are not correlated with the level of reported variation. In the case of Louisiana French liaison, the level of variation is lower than for other sound patterns, such as the substitution of [h] for /ʒ/ (Carmichael 2007) or /ɛ/ lowering before /r/ (Blainey 2015). This may lend support to Connell's (2002) hypothesis.

Another question driving sociolinguistic research in threatened language communities has to do with the relation between language contact and language variation.² How can we tell if the (absence of) variation is due to language contact, and that it is not simply the nascent, incipient or completed change observable in any language? Syntactic evidence from contact varieties of Western languages provides a nuanced view of this question. At one end of the spectrum, in their examination of minority French varieties spoken in the Channel Islands and in North

¹Note that the question of ethnicity in French-speaking Louisiana is a complicated issue, as language labels and ethnic labels do not perfectly correspond to one another (Klingler 2003, 2005).

²A reviewer points out that naturally, language contact can also be a factor in healthy language varieties. Since language contact is a factor in nearly all endangered language varieties, but not in all healthy language varieties, it is treated here as a special consideration for researchers of threatened language varieties.

America, Gadet and Jones (2008) demonstrate that virtually none of the syntactic changes that they examine are due to language contact alone, in keeping with the “multiple causation” principle defined in Thomason and Kaufman (1988: 57, cited in Gadet and Jones 2008: 239) and with Silva-Corvalán’s (1991, 2008) research on Spanish in the United States. In the middle, Neumann-Holzschuh’s (2009) work on Acadian and Louisiana French syntax shows that some processes corroborate the results of Gadet and Jones (2008), but that others, such as preposition stranding and accusative object pronoun postposition, appear to be due to language contact and convergence alone (Neumann-Holzschuh 2014)³. At the other end of the spectrum, Mougeon et al. (2005) focus on post-verbal prepositions and certain verbs in Ontario French, demonstrating that all eight of the innovations they observe are solely due to language contact. Moreover, they conclude “that there are thresholds of contact with English below which or above which innovations that deviate more or less from the traditional norm will or will not emerge” (Mougeon et al. 2005: 113).

Based on these studies, it appears that certain variable parts of a language’s syntax, such as French prepositions, may be prone to copying in language contact situations. Indeed, in Louisiana it is the study of intergenerational transfer of preposition use that reveals effects of language contact and bilingualism (Dubois and Noetzel 2005). However, much remains to be understood about how contact affects variation, and which components of the grammar are most easily affected by language shift. As a phenomenon that implicates both French phonology and syntax, liaison can involve prepositions (e.g., *dans un parc* ‘in a park’). This makes French liaison an intriguing subject of investigation for questions of language contact and obsolescence.

In sum, it is important for the researcher of an obsolescing language variety to be cognizant of potential differences in motivation and goals at the outset of the research project, so that analyses resulting from the research can be properly contextualized within the sociolinguistic literature. The Methods sections explores how researchers can adapt protocols designed for vibrant language varieties to suit the context of an endangered language variety, by taking into account questions of available speakers, literacy, age, past language-related trauma, and power dynamics with community outsiders.

3. DIFFERENCES IN METHODS

The following sections explore methodological differences between sociolinguistic fieldwork in healthy language communities and in threatened language communities, using the design of the Louisiana French liaison study as an example.

³Note that Poplack et al. (2012) argue convincingly against language contact as an explanation for preposition stranding in Quebec French.

3.1 Variables to study

In sociolinguistic fieldwork, “[t]he most frequently studied variables are phonological and morphological” (Feagin 2013: 23), but in language death research, “most work on the role of convergence in attrition has focused on aspects of the morpho-syntactic restructuring of the attriting language” (Bullock and Gerfen 2004: 95). Fortunately, more recent work features phonetic and phonological analyses of endangered languages (e.g., Stanford and Preston 2009, Smakman and Heinrich 2015). The current study of Louisiana French liaison contributes the perspective of a complex phonological process in an endangered variety of a Western language.⁴

Liaison is a sandhi phenomenon: a liaison consonant appears between two words which, when said in isolation, do not contain the liaison consonant (e.g., in Louisiana French, *mes* ‘my’ [me] + *amis* ‘friends’ [ã.mi] → *mes amis* ‘my friends’ [me.zã.mi]). By convention, the first word in the pair (e.g., *mes* ‘my’) is referred to as *W1*, while the second word (e.g., *amis* ‘friends’) is referred to as *W2*. Variable liaison environments have been linked to language learning and literacy (Laks 2005), making an orally transmitted variety such as Louisiana French an interesting testing ground for variability in French liaison.

3.2 Addressing questions of literacy in the endangered language variety

In order to create a workable research methodology for studying an endangered variety of a Western language, it is often necessary to modify a larger project’s general protocol so that literacy is not a prerequisite for participation. Regarding French liaison, reading exercises can be helpful for examining the effect of the written word on adults’ variable liaison use. However, only oral exercises are appropriate with Louisiana French speakers. This presents the uncommon and exciting opportunity to explore the evolution of French liaison in the absence of a written norm. It is important to remember as well that some elicitation tests may be inappropriate in a situation of language endangerment. For example, tests of linguistic insecurity (e.g., as outlined in Labov 1984) are not effective in a community that does not have an overarching prestige variety, such as the Louisiana French community.

The most recent recordings of 20 speakers for the current case study (Blainey 2013) rely on Klingler and LaFleur’s (2007) adaptation of the global Phonology of Contemporary French project (*Phonologie du français contemporain [PFC]*, Durand et al. 2002, 2009) for French-speaking Louisiana. The PFC has as its general goal to capture French as it is spoken around the world, focusing on the dynamics of French schwa and liaison patterns. Part of the linguistic interview requires the speaker to read a word list and a short passage in “Standard” French. As this would not be appropriate in Francophone Louisiana, where speakers do not read and write in French and where use of “Standard” French serves to remind them of the self-perceived inferior status of their own French, Klingler and

⁴For overviews and quantitative analyses of French liaison in healthy varieties of French, see Durand and Lyche 2008, Mallet 2008, Côté 2011, Durand et al. 2011.

LaFleur (2007) employ translation exercises as substitutions that maintain the formality and structural consistency of the reading exercises. Due to widespread lexical variation in Louisiana French, Blainey (2013) further tailors the translation activities in order to make them suitable for Lafourche Parish Louisiana French speakers, a method that will likely be necessary for any endangered-language-variety field-worker using a protocol designed for a larger language.

3.3 Archival data collection

Recent sociolinguistic research has greatly benefited from longitudinal language data (see Sankoff 2005, Wagner 2012 for overviews), allowing researchers to test (either by using panel or trend studies) the apparent-time hypothesis (Labov 1963, 1966), as well as to examine the different types of change that can happen over a person's lifespan (see Labov 1994, Sankoff and Blondeau 2007). However, the reason a language variety is endangered is often that it has been historically devalued, as a method of communication, as a mark of identity, and as an object of social-scientific study. This lowers the chance that previous linguistic recordings exist for the language variety. Of course, it is always possible that previous linguistic work has been carried out, especially for endangered varieties of Western languages. For example, the earliest phonetic transcriptions of Louisiana French used in the current case study come from the appendix of John Guilbeau's doctoral dissertation, from seven speakers recorded in the 1930s and 1940s (Guilbeau 1950). Nevertheless, it is crucial for the sociolinguist to explore all possible sources of diachronic information. One potential trove of past recordings, particularly for enclave varieties of Western languages, may come from non-linguistic academic research. In Louisiana, for example, folklorists such as Alan Lomax and Irene Whitfield made recordings of Louisiana French musicians singing in their native tongue as early as the 1930s (Whitfield 1939, Caffery 2014). As part of the Louisiana Project (*Projet Louisiane*), Canadian anthropologists and sociologists also conducted interviews with Louisiana French speakers in the 1970s in order to better understand the social networks and ways of life that held Francophone communities together in the state (Breton and Louder 1979, Louder and Waddell 1979). Such musical compendia and social-scientific interview corpora can sometimes be found with the help of university archivists and reference librarians. Again referencing the case of Louisiana French recordings, the extensive Archives of Creole and Cajun Folklore at the University of Louisiana at Lafayette's Center for Louisiana Studies (2011) provide a searchable database of Louisiana French recordings from various research initiatives, such as those mentioned above. The current case study draws from these archives, selecting 12 interviews made in 1977 by Alain Larouche (Larouche 1979, 1980) as part of the Louisiana Project. Conathan (2011) includes further ideas on where to find archival language materials, as well as recommendations to researchers on how to create durable, archive-ready materials.

Other sources of longitudinal linguistic data may be community cultural centres, churches, and libraries. Libraries provide a drop-off point to community members who discover old cassettes or communication records; cultural centres may have

historical displays of local lifeways and language use; and churches often contain valuable birth, death, and marriage records. Employees at these centres often have a passion for digging up old records and recordings, and can also prove to be good allies for making contact with native speakers. Furthermore, unpublished or locally published historical accounts of the speech community may only be available at these locations, revealing to the researcher useful lines of questioning for sociolinguistic interviews.

Online, researchers can consult video-sharing sites such as Youtube, or social media sites like Facebook, to find publicly available recordings of speakers. There are many video recordings of older fluent Louisiana French speakers available on Youtube, for example. In terms of more general demographic information, ancestry-building websites can prove useful in the event that public records are scarce. This is true for Louisiana French, since hurricanes, heat, and humidity have led to the loss or degradation of public records: genealogical information furnished by Louisiana natives and distant relatives in the French-speaking world can help to piece together past marriage, living, and migration patterns of the Louisiana French speech community.

Finally, by consulting with community members directly, researchers can sometimes benefit from family records, old recordings, or personal letters (if the language variety has a written code). This brings us to the question of finding, selecting, and contacting native speakers for interviews.

3.4 Discovering the demographics of the speech community

The sociolinguistic methodology for interviewing speakers of a healthy language variety normally specifies X speakers per pre-defined subgroup (e.g., generation, sex, socioeconomic status, level of education), but this model is not straightforward for threatened language varieties. The small number of speakers available for interview can be a daunting reality for the fieldworker's enterprise with an endangered variety of a Western language. Of those community members who are fluent speakers of the language variety in question, only a subset are typically willing to speak their native tongue in the presence of outsiders. Which regions have the highest concentrations of fluent native speakers? How many fluent speakers who are older or younger, male or female, urban or rural (and so forth) can one hope to find and interview? This calls to mind Labov's famous characterization of historical linguistics as "the art of making the best use of bad data" (Labov 1994: 11). The challenge for the researcher is to use effective planning and strategies to maximize the pool of potential native speakers.

Census records and previous studies working to establish the parameters of the speech community can be enormously helpful. For instance, the United States census provides the basis for general estimates of the vitality of French varieties in Louisiana. Census statistics must be approached with caution in the case of Louisiana, both because of varying use of language labels across the state, and because of changing wording over time on the census itself, but they do provide a general picture of French language use in the State. Data for the current case study

come from Golden Meadow, Lafourche Parish, due to a much higher than average concentration of native French speakers in this town of 2,200 people (28% French-speaking in Golden Meadow versus 3% French-speaking in Louisiana (Census Bureau 2011)). To give two examples of academic studies scrutinizing the sociolinguistic context in Louisiana, Neumann-Holzschuh (2014) provides a better understanding of the history of language and dialect contact in Francophone Louisiana, and Blyth (1997) lays out the contemporary sociolinguistic situation of Louisiana French. As for the documentation of field methods and speaker attitudes, Dubois details her extensive survey of four Louisiana parishes, looking at linguistic fluency, ethnic identity, and language attitudes, notably showing that “specific sociolinguistic forces (i.e., age, gender, and geographic factor) influence the attitude of the respondents” (Dubois 1997: 68). The work includes excellent recommendations for fieldwork methods in Louisiana. Taken together, these resources reveal to the sociolinguist what kinds of demographic challenges and particularities the enclave speech community may present.

One such particularity is the question of how to discover and define generational divides. As with all linguistic research, speakers will not likely fall into neat decade-based generational categories. Rather, generational divides correspond to significant changes in the community’s relationship with the contact language. In Louisiana, one such change was the arrival of the petroleum industry in rural communities (Larouche 1979). There are government-funded projects on how large industries have impacted communities along the Gulf Coast; as a result, the effects of the oil and gas industry on the area have been painstakingly studied and documented, complete with firsthand accounts (McGuire 2004). Furthermore, Dubois (1997: 48) establishes a Linguistic Ability and Background index, defining different generations of speakers based on their language learning environment as children (Dubois 2005: 288–290). This research sheds light on how generational divides can be classified, based on socio-economic and sociolinguistic changes in the community through time.

Such resources also aid the sociolinguist in the essential task of assessing each speaker’s fluency in the enclave variety. Correctly assessing speaker fluency is important because semi-speakers (Dorian 1977) have markedly different grammars than older fluent speakers, as has been shown in Louisiana French (Rottet 2001). Depending on the project and its aims, as well as the demographics of the speech community, the researcher may need to draw exclusively on the expertise of older fluent speakers (as is true for the PFC project), but for larger documentation projects such as Rottet (1995) and Dubois (1997), it is best to interview the widest array of speakers possible. The simplest approach, when seeking out potential interviewees, is to rely on the expertise of a local native speaker. The next section focuses on how to find such a person.

3.5 Community co-investigator(s)

Working with a community insider can help the field researcher avoid many pitfalls, and this is particularly true in communities of endangered language varieties. In order to make contact with a local native speaker who is willing to collaborate on a research

project as a co-investigator, there are several options available. First, depending on the amount of existing literature on the language variety in question, the researcher can contact other academics who have interviewed native speakers, asking for suggestions regarding potential local contacts; this was the method followed for the 2010 Louisiana French interview recordings. Second, the researcher can contact community or government agencies linked to language empowerment, maintenance or revitalization efforts, where interested local activists and fluent speakers are likely to convene. These types of introductions to potential co-investigators through an established person or agency are optimal, because they help to mitigate natural feelings of mistrust on the part of locals meeting an outsider with a microphone and a project protocol.

If such intermediaries are not available, a third option is to travel to the community directly, and to speak to community leaders such as shop owners, religious leaders, or political leaders, explaining the project's aims and asking for introductions to local native speakers who might be willing to participate in the project as co-investigator(s). Note that while the third option may work very well in a healthy language variety (Labov 1984), the political or religious power structures in place may be the very forces that are driving language endangerment, so that there may not be feelings of trust between authorities and local people when it comes to questions of language. However, having a local native speaker as an ally and co-investigator in the community is very important, making the selection of at least one of these options imperative.

A brief note on the researcher's sex: it is advantageous (depending on social norms, local customs, and availability in the language community) to find a co-investigator of the opposite sex, because endangered language researchers have reported discrepancies in speaker participation that appear to depend on the interviewer's sex. For example, Nagy (2000: 149) notes that "the men in [her] age range were inhibited, to some extent, by social norms, which do not permit [one-on-one and small-group conversations] between 'marriageable' members of opposite sexes, unless an engagement is meant to be the outcome." Likewise, in the case of Louisiana French, Rottet (1995: 309) reports that "most (if not all) of the people who refused to be interviewed were women. This could be related to the fact that the researcher is male, but it could also be indicative of language attitudes." Since sex can still be an active sociolinguistic factor in situations of language shift (Cavanaugh 2006), the sex of the co-investigator (assuming that there is a choice of co-investigator) is an important consideration as the researcher prepares to go into the field, so that a balanced speaker sample may be obtained.

3.6 Making contact and minimizing discomfort

By working with a community insider, the researcher can also minimize other instances of native speaker embarrassment and refusal. In the heart of Francophone Louisiana, it can suffice to approach individuals during cultural festivals, religious events, or in the community itself, simply asking *vous-autres parle cadien?* ('do you speak Cajun?') (e.g., Dajko et al. 2008), but not all Louisiana

French speakers feel comfortable using their native tongue with strangers. Moreover, in other language contact situations, such behaviour may intimidate speakers and/or violate cultural norms. Consultation with a community insider co-investigator before approaching native speakers can circumvent such problems, and the co-investigator's presence at initial meetings can encourage participation and trust on the part of native speakers.

The question of power dynamics and language use is of utmost importance when the researcher approaches and converses with endangered language speakers. It is crucial to discover which languages or varieties will provoke a negative reaction, and the best course of action is again to seek advice from local language activists, authorities in the linguistic community, and the community insider(s) with whom the researcher is collaborating. In the case of Lafourche Parish Louisiana French, for example, English language use was forced upon children in the school system beginning in the 1920s (State of Louisiana Constitution, Art. 12, §12, 1921), and upon adults working in the oil and gas industry beginning in the 1930s (Larouche 1979). While some speakers avoided the school-based language indoctrination (along with the physical and emotional abuse it entailed) by not attending class, the influx of foreign Anglophone workers to the oil fields resulted in considerable intercultural and interlinguistic conflict:

Relations were most strained in Lafourche, where a sizable group of Anglo-Americans worked in oil fields around Golden Meadow. Cajuns became targets of ridicule in their own homeland [...] the Cajuns called the newcomers 'les maudits texiens' (damned Texans) regardless of their place of origin and derided them for bringing honky-tonks, bad credit, drunkenness, fighting, prostitution, and polygamy to the parishes (Bernard 2003: 37–38).

As a result, one might assume that English language use should be avoided with Louisiana French speakers. However, beginning in the late 1960s, language revitalization efforts promoted foreign varieties of French in the school system (Henry 1997: 194). Because of this, older fluent Louisiana French speakers were confronted with grandchildren who attempted to speak to them in French, but who used non-native vocabulary, constructions, and pronunciations; this served to drive home feelings that Louisiana French was a broken and inferior dialect that did not deserve to be taught in school (Ancelet 1988: 351). Thus, it is "Standard" French that is the shame-inducing speech variety, while English is now seen as a neutral form of communication.

Learning this lesson can be costly. In one early instance, the author began interviewing a fluent Louisiana French speaker with two other L2 French interviewers, and accidentally used a construction that does not exist in Louisiana French (*qui fais-tu pour la vie?* instead of *qui tu fais pour la vie?*, 'what do you do for a living?'). For the native speaker, this was sufficient evidence that the author spoke *le bon français* and therefore would not understand this person's French, effectively ending the interview. Fortunately, the Louisiana French speaker agreed to talk to the other interviewers, answering the author in English for the remainder of the interview.

So then, what if the researcher speaks the very speech variety that inflicts feelings of shame on older fluent speakers, making them unwilling to converse in their native tongue? The onus is on the researcher to avoid using the offensive language variety, working to use the local variety as much as possible. One strategy is to present the researcher as an interested outsider who would like to learn the language, and to ask speakers' forgiveness in advance for any errors. This places native speakers in their rightful respected place as language experts and teachers. It also firmly establishes the researcher as a community outsider in contrast to the community insider co-investigator, encouraging a stylistic differentiation between insider- and outsider-directed speech (Bell 1984).

By the same token, translation or reading activities may have a negative effect on speakers because they recall childhood traumas suffered in the school system. In French-speaking Louisiana, many speakers express feelings of silliness when they are asked to complete counting exercises (e.g., *une école, deux écoles, trois écoles...* 'one school, two schools, three schools...'), or to translate strange words or sentences into French. Worse, speakers can become frustrated and upset that they cannot remember how to translate a word or phrase. The field researcher must work to reassure native speakers that there are no right or wrong answers, and that the responses that they have provided are valuable for research and for future language learners. In the case of Louisiana French liaison, for instance, counting exercises helped to confirm that liaison [z] functions as a morphological plural marker on nouns.

Finally, it can be awkward for the community insider to carry on an informal conversation with other native speakers, precisely because in smaller, tight-knit communities, the co-investigator may already feel that they⁵ do not have many questions to which they do not already know the answers. In such instances, going through potential questions (such as those modeled in Labov 1984) with the co-investigator in advance may provide them with a set of go-to questions. Talking with the co-investigator about any curiosities they may have about social and family dynamics, customs, or lifeways in the community's past may also lead to questions they consistently ask informants. In Louisiana, for example, a virtually fail-proof line of questioning revolves around food preparation and consumption; this is a recurrent theme in the community insider interviews of Blainey (2013).

4. DIFFERENCES IN RESULTS

The following sections outline potential differences in the calculation and characteristics of sociolinguistic results from endangered language communities, using the example of liaison in Louisiana French.

⁵Here, the pronoun "they" is used as a neutral third-person singular pronoun, in place of "he or she".

4.1 Tests of statistical significance

Tagliamonte (2006) provides an excellent guide for variationist statistical tests, focusing on logistic regressions in Goldvarb (Sankoff et al. 2005). Contexts of language endangerment, however, may not provide the quantity or type of sociolinguistic data necessary for logistic regression analysis. Furthermore, with the increased likelihood that individual speakers have “personal-pattern variation” (Dorian 1994: 635) that cannot be explained by larger sociolinguistic groupings such as age, sex, or level of education, it is important for sociolinguistic research to incorporate the individual in statistical analyses whenever possible. Mixed-effects models using R (R Core Team 2015) or R-based variationist platforms like Rbrul (Johnson 2008) can control for factor group interactions and include the speaker as an external factor group. Again, such models require larger numbers of tokens than may be available from sociolinguistic fieldwork in an endangered community. In the case of Louisiana French liaison, despite a reasonable number of tokens for 38 speakers (3,317 tokens), a mixed-effects model was not possible due to variation in the number of tokens contributed by each speaker (ranging between three and 103) and forms of invariability that further eliminated most tokens from the analysis, which will be discussed in section 4.2. As a result, the analysis relied on bivariate parametric tests of significance. While mixed-effects models may be the ideal analytical tool for variationist sociolinguistic analysis, research involving endangered varieties of Western languages may not be in a position to use them.

4.2 Data characteristics

After collecting, coding and analysing the data, the sociolinguist may discover that there is not as much variation as previously thought, as has sometimes been the case in healthy language varieties (D’Arcy and Tagliamonte 2015). This is certainly true of Louisiana French liaison patterns in Lafourche Parish. As outlined in section 3, the analysis considered the speech of 38 Louisiana French native speakers living in South Lafourche Parish, recorded at three points in time: 1939, 1977, and 2010 (Guilbeau 1950, Larouche 1979, Blainey 2013).⁶ When there does not appear to be variability in the data set, despite predictions to the contrary, it is important to verify that nothing has been overlooked. In the case of Louisiana French liaison, multiple aspects of the token set proved to be invariable and imbalanced, which greatly reduced the number of tokens for analysis. First, there was the question of which words could form liaison pairs, in terms of the syntactic identity of the first word (W1) and the second word (W2) (e.g., Noun-Determiner, Pronoun-Verb, Preposition-Determiner). Of 97 syntactic W1-W2 combinations, 84 were invariable, and only four of the variable W1-W2 pairs (representing 34 tokens) had liaison rates between 33% and 85%. Indeed, the apparent variability of those four W1-W2 types

⁶One male speaker was recorded in both 1939 and 1977; all other speakers in the analysis were recorded at one point in time. The 1939 speakers were all French-dominant; the 1977 speakers were nearly all fluent French-English bilinguals; all the 2010 speakers were all fluent bilinguals. Speakers had very limited to no knowledge of “Standard” French.

may have simply been a result of low token numbers. Second, when only the variable W1-W2 combinations were considered, there was no change in the rate of liaison over time, and chi-square tests did not reveal significant effects of other sociolinguistic factors such as sex or generation, even though phonological research on Louisiana French liaison has noted age-based changes in liaison use (e.g., Boutin and Lyche 2014).

Third, when the liaison consonants (/n, t, z/) were compared for each variable W1-W2 combination type, in the majority of cases one or more of the liaison consonants was categorical. Fourth, once the liaison consonants were separated within the variable W1-W2 pairs, lexically-based categorical behaviour became apparent. Indeed, the three most frequent W1s (*on, en, les*) accounted for over half the tokens in this subset of the data. Thus, while the invariability encountered within the data set ruled out the possibility of using mixed-effects models by eliminating too many tokens, it also revealed considerable stability in a situation of language contact and shift. The case study of Louisiana French liaison demonstrates that variationist research involving obsolescing varieties of Western languages may produce this type of unexpected result, further enriching knowledge about language contact and variation.

The sociolinguist may also find similarities to healthy language varieties in the patterns present in endangered language varieties. In Louisiana French, cases of invariable (and nearly invariable) W1-W2 liaison pairs reflected liaison trends in other varieties of French. For example, combinations such as a determiner followed by an adjective (the first two words in *un autre homme* ‘another man’) always liaised, while pairs such as a verb followed by a preposition (the last two words in *il parlait avec* ‘he spoke with’) never liaised. Moreover, the majority of categorical W1-W2 liaison behaviour (78 of 84 W1-W2 pairs) represented non liaison, and largely corresponded to environments where liaison is infrequent in other French varieties. The (nearly) invariable patterns in Louisiana French thus represent a highly regularized version of trends in other varieties of French, where liaison has been described as both “profoundly variable and unstable” (Durand et al. 2011: 130) as well as “extraordinarily constrained and limited” (Durand et al. 2011: 131).

5. DISCUSSION

The previous sections have outlined the methodological considerations and challenges particular to (or especially important for) variationist research on endangered varieties of Western languages; I now review five of these observations. First, the example of Louisiana French liaison demonstrates that even when longitudinal data are available, they may be insufficient for robust multivariate statistical analyses, and some speakers may contribute many more tokens than others.⁷ This makes

⁷While the same is true for healthy language varieties, it can be more difficult to find talkative participants in a situation of language shift, which is often characterized by smaller speaker populations and negative language attitudes.

speaker-based analyses difficult, and sometimes impossible. Indeed, in the case of Louisiana French liaison, it was necessary to use tests of statistical significance other than logistic regression and mixed effects models. Second, morpho-phonological stability can exist even in the midst of language endangerment, especially among older fluent speakers. It is crucial for researchers to specify the fluency of the speakers and the research methodology in order to permit comparisons with other work.

Third, linguistic phenomena which are highly variable in healthy language communities may be less so in threatened language communities, but this may also be due to questions of literacy and pedagogical norms. On one hand, in a situation of language shift, Bradley (2002) argues that an “ideology of purism” can exist, so that speakers view language variation negatively because they believe it underscores the absence of a prestige norm. On the other hand, Connell (2002) observes that some endangered communities with very few speakers exhibit high levels of linguistic variation, and research suggests that French speakers acquire variable liaison within the school system when they learn to spell (Côté 2008, Laks 2005). Fourth, a community insider is very helpful for all aspects of linguistic fieldwork, and provides a potentially more vernacular speech style for analysis. Within the context of the Louisiana French liaison study, the community insider who helped make the 2010 recordings suggested alternatives to problematic translation sentences; found speakers with the appropriate sociolinguistic background and encouraged them to participate; and provided essential feedback on elicitation strategies, transcription judgments and community norms. Fifth, a larger project’s methodology can be effectively adapted to suit an endangered, oral language community, and specific modifications will depend on the locale and situation of the community.

There is still much to be discovered. Thomason (2008: 54) underscores our limitations in predicting language change in a situation of endangerment and shift:

We can make rough predictions about types of change to be expected under different social conditions (for instance with the distinction between borrowing and shift-induced interference), and we can often predict the direction of change; but we can’t even be sure that contact-induced change will occur in any given contact situation, much less predict what form it will take if it does occur.

With more quantitative analyses of endangered varieties of Western languages, the field of sociolinguistics can continue to shed light on the nature and direction of language change in all language communities. Longitudinal research on endangered language communities can provide insight for questions pertaining to bilingualism, lifespan change, grammaticalization, literacy, and anthropology, in addition to those of sociolinguistics and language shift.

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